

CHAPTER V

Launching Defense Construction

During the fall of 1940 work flowed into the Construction Division with unprecedented speed. Beginning shortly after Labor Day, the flood of directives reached its crest in October. On 11 September orders arrived for 9 large camps and one general hospital. Three mornings later the stack of mail on General Hartman's desk contained authorizations for 8 additional camps and 2 lesser ground force projects. On the 19th, when 9 more camps, 7 miscellaneous housing projects, 2 airfields, and a munitions plant were added to the rapidly growing list, one of Patterson's assistants informed him: "Work is now arriving and amounts to a total which was not reached until nine months after war was declared in 1917."¹ The total continued to climb. By late October Hartman had on file more than 300 emergency directives for jobs ranging in size from a single structure costing a few thousand dollars to a 75-million-dollar smokeless powder plant. With these directives came orders for the inevitable extras—service clubs, guest houses, infirmaries, dental clinics, officers quarters, induction buildings, chapels, painting, and paved roads.² To get this program under way was Hartman's first objective.

In ordinary times launching construction was a complicated process consuming months and sometimes years. Plans and specifications were prepared beforehand and in full detail. Estimates were figured with scrupulous exactitude. Sites were thoroughly surveyed, and layouts were drawn with care. Land was acquired by negotiation with the owners, which often meant much patient bargaining, or by condemnation, which might drag slowly through the courts. In neither case could building commence until the Attorney General had cleared the title; a law of 1841 forbade it. Another source of delay was the Bacon-Davis Act of 1931, which assured most laborers and mechanics working for government contractors wages not less than those prevailing on similar jobs in the locality. The task of determining the prevailing rates fell to the Secretary of Labor, who normally took from four to six weeks to complete the process.³ It was customary to make a separate "predetermination" for each contract. "Thus," as Hartman's adviser on labor relations, Leslie E. Brigham, explained, "if one building was to be constructed the whole process of determining wages . . . was gone through with. Then, if two weeks later another building was put up across the

¹ Memo, Maj Simpson, OASW, for ASW, 19 Sep 40. QM 022 (Constr Div).

² (1) Constr Div OQMG, List of Directives, 15 Mar 41. EHD Files. (2) Constr PR's 15 and 29, *passim*.

³ (1) 5 Stat. 468. (2) 46 Stat. 1494. (3) 49 Stat. 1011. (4) Ltr, Seaman to TAG, 10 Oct 39. OCE Legal Div, Labor (Dept of) to 4-29-43.

street involving exactly the same trades, the process was again repeated.”⁴ Underlying much of the slowness with which most peacetime projects started was the law requiring competitive bids. Not until plans were firm, sites available, and minimum wage rates fixed could the machinery for advertised lettings go into motion.

With the emergency of 1940 “time is of the essence” became the watchword and speed became the “paramount consideration.” But, before it could rally to these slogans, the Construction Division first had to free itself from the shackles of peacetime procedures. This it attempted to do and with considerable success. The Act of July 2, 1940, the negotiation statute, cut through the tangle of competitive red tape. An understanding between Brigham and officials in the Labor Department put an end to duplicate predeterminations; wage rates were henceforth determined for a given locality and applied to all jobs undertaken there during a 90-day period. Legislation urged by Colonel Valliant and enacted on 9 October 1940 permitted construction to begin before property titles had been proved valid.⁵ Removing these procedural obstacles helped clear the way for action. Still there remained the task of starting a billion-dollar program almost overnight.

The sudden surge of directives transformed the central office into a hive of frantic activity. “Nowhere in these high-

pressure days is the heat any hotter and the pressure any greater in Washington than in the Construction Division of the Quartermaster Corps,” wrote columnist Jerry Kluttz early in October.⁶ To members of the Hartman team the description seemed apt. It was hectic, one man recalled. Another likened the division to a madhouse. The still relatively puny force was nearly snowed under with work. Mail arrived by the truckload. One small section of the Engineering Branch soon had a backlog of 1,100 unanswered letters. Calls swamped the switchboard. The halls teemed with visitors, as contractors, materialmen, equipment dealers, and a good many others beat a path to the men with a billion dollars to spend. Only by unremitting effort was the division able to keep abreast of it all.⁷

In the Munitions Building space was at a premium. With scores of new employees already at work and more arriving daily, the division had to utilize every available inch. Even storerooms served as offices, and some areas were so jam-packed that people had to climb over desks in order to move about. Hartman, who had been battling for larger quarters since spring, attributed these cramped conditions to “a total lack of appreciation by the Space Procurement Officer of the War Department and General Gregory of the office space needed.”⁸ Gregory was at length won over. “It seemed to me,” he later said, “that

⁴ Rpt, Brigham to Bennett, 30 Sep 40. EHD Files.

⁵ (1) *Ibid.* (2) Memo of Understanding, Dept of Labor Office of the Solicitor for Bennett, 28 Sep 40. OCE Legal Div Lib, Labor Wage and Hour Decisions. (3) Draft of Ltr, Woodring (RDV) to Chrm H Judiciary Comm (Jun 40), and notations thereon. QM 601.1 I. (4) 54 *Stat.* 1083.

⁶ *Washington Daily News*, October 7, 1940, p. 14.

⁷ (1) Intervs with Col Simon Jacobson, 7 Jun 55; Henry J. Klein, 29 May 57; Gen Dreyer, 27 Feb 59. (2) Ltr, Gavin Hadden to EHD, 22 May 53. (3) Answers to Questionnaire, Col Violante to EHD, 25 Sep 57.

⁸ Statement of Gen Hartman, 5 Jul 55, pp. 7-8.

one of the things we had to fight every minute was getting more office space Finally, after much clamoring and so forth, we got what was known as the Railroad Retirement Building."⁹ The division moved to its new quarters early in October. But even then, Hartman complained, "there was just about half the space required This necessitated sending part of the personnel outside of the building with consequent loss in efficiency."¹⁰

Despite many vicissitudes, the division's morale was good. Everyone worked long and hard. The chief himself set the pace, taking time out only when he could keep awake no longer. Key officers stayed at their jobs until eleven o'clock seven nights a week, and, although the War Department had approved no overtime pay, civilians stayed, too. Most of the younger men took it in stride. One 34-year-old captain reported that the effort was no strain. But to men in their 50's and 60's these were arduous days. Jacobson, who was 52, wondered at times how long he could last, and Lamphere, at 59, allowed that he was not "so full of vinegar" as in 1917. If there was plenty of hard work, there was also plenty of jollity.¹¹ Even from the front office, where events flowed fastest, came sounds of laughter now and then. There Major Nurse maintained a daily log. "General Hartman was aware of this diary," Nurse related, "in

fact, he encouraged me in keeping it up. When things got especially tough and he felt in the mood for a laugh (God knows he needed it on occasion), he would come to my desk and glance through my remarks and sketches which were often of a humorous sort."¹² Hard pressed though they were, Hartman and his crew generally displayed good humor, enthusiasm, and a will to do.

September found preparations well advanced and all the branch chiefs pushing their phases of the operation. The fixed-price end of the program was under Violante's firm control. Bennett in Administrative, White in Repairs and Utilities, Koke in Auditing and Accounting, and Value in Liaison had their departments well in hand. Jacobson in Procurement and Expediting was ordering such varied items as kitchen equipment, laundry machinery, fire engines, furniture, and stoves. Jones in Legal was reviewing contracts and devising ways to get things done and still keep within the law. Bayer in Funds and Estimating was putting out a new manual for Constructing Quartermasters. The free lance, Major Thomas, worked at many jobs, establishing a system of progress reporting, trying to set up audit machinery, running the school for Constructing Quartermasters, breaking in new employees, and more. Yet in these critical weeks of getting started, the burden of responsibility fell with special weight on certain individuals and branches, on Lamphere and Engineering, Valliant and Real Estate, the Construction Advisory Committee, Loving as chief negotiator, and, most heavily, on General Hartman.

⁹ Verbatim Rpt, Meeting with Gregory and Hastings, p. 9.

¹⁰ Statement of Gen Hartman, 5 Jul 55, p. 8.

¹¹ Intervs with August G. Sperl, 18 Jun 56; Col Thomas, 27 Dec 55; Gen Dreyer, 27 Feb 59; Col Jacobson, 7 Jun 55; Mr. Lamphere, 26 Jun 56.

¹² Ltr, Nurse to OCMH, 9 Mar 55. EHD Files.

Policies and Policymakers

Undertaking the first mobilization program in more than twenty years, Hartman proceeded with the lessons of history in mind. As in World War I, military construction was to be largely a civilian endeavor. Heavy reliance was placed on industry. Rejecting the theory that the Army itself might do the work, using purchase and hire, Hartman turned to contractors and architect-engineers. He asked manufacturers of construction materials to double and treble their output. He appealed to workers in the building trades for co-operation. He designed the Army-industry team for getting work done fast. Nevertheless, he was keenly aware of his responsibility for protecting the public interest. It was, he emphasized, the duty of every construction officer "to see that all money is wisely and honestly expended."¹³ Once again dollars would be traded for days but somewhat less freely than in 1917.

Under emergency conditions, cost-plus-a-fixed-fee was, as Dresser put it, "the only way."¹⁴ The CPFF contract was not merely a timesaver; it could, if skillfully administered, save money as well. "I have always been convinced," said Hartman, "that this form of contract is an economical one, provided that proper safeguards are thrown around the cost accounting of the project and also that strenuous efforts are made to keep politics and political appointees out of the picture."¹⁵ His solution to the political problem was the Construction

Advisory Committee, which would choose contractors without fear or favor and on the basis of merit alone. His auditing system confirmed the promise he had made to Congress in 1939, that all expenditures would be subject to absolute check and control. The new fixed-fee contracts promised reimbursement only for such "actual expenditures in the performance of the work as may be approved or ratified by the Contracting Officer," and one of the chief duties of Constructing Quartermasters was to make certain that the government received full value for money paid out.¹⁶ Nor did the effort to marry speed and economy end there, for Hartman tried by every means he knew to get the most for every fixed-fee dollar.

CPFF contracts made possible substantial savings on bonds, insurance, and taxes—expenses lump-sum contractors passed on to the government in the price of their bids. Because the Construction Advisory Committee was selecting contractors of outstanding ability and unquestioned integrity, performance bonds were unnecessary; and, since fixed-fee contractors would receive no reimbursement for labor and materials until they turned in vouchers, the requirement for payment bonds was superfluous. At Hartman's prompting, Congress excepted fixed-fee contracts from the law that made bonding mandatory. Since it was government policy to self-insure against fire, and since fixed-fee contractors were, in fact, agents of the War Department, fire insurance was nugatory. Additional savings were made by reducing the amounts the government

¹³ OQMG Manual, Supplement to Guide for CQM's, Rev 1940, Covering FF Projects, 27 Aug 40, p. 1. EHD Files.

¹⁴ Dresser Interv., 2 Apr 57.

¹⁵ Statement of Gen Hartman, 5 Jul 55, p. 11.

¹⁶ CPFF Form 1, approved by the ASW, 12 Jul 40, art. II.

indirectly paid in taxes. Fixed-fee contractors were exempt from certain federal levies, including transportation, communications, and manufacturers' excise taxes. Moreover, Hartman resisted collection of state and local taxes from these contractors, maintaining that the burden would fall on the United States. Of twenty-two states imposing sales, use, and similar taxes, eighteen granted full or partial exemptions, while four continued to exact payment.¹⁷ Although savings on these items amounted to a considerable sum, they were negligible compared with savings possible on materials and labor.

As the Army, the Navy, and other federal agencies got defense construction under way and private industry began expanding for war production, the demand for building materials rose rapidly. Scarcities developed, deliveries slowed, and prices started to climb. Hartman took steps to combat shortages and high costs. First, he tailored requirements to fit supplies. When the lumber industry revealed that it had on hand huge quantities of 10-foot joists—a short, nonstandard length which had been stockpiled as culls—he ordered structural blueprints altered to take the shorter studs. In the Engineering Branch, Lamphere

made similar changes, adjusting specifications to productive capacity whenever possible. As a second step, appeals for help were broadcast to industry. The response was gratifying. The Southern Pine Association formed a special war committee to co-operate with the Army. The Lehigh Portland Cement Company placed its nationwide organization at the division's disposal to assist with procurement. Meanwhile, Hartman was banking heavily on a third expedient, centralized purchasing, to help stabilize lumber prices and keep his projects supplied. Colonel Jacobson waited only for the necessary funds before swinging into action.¹⁸

Even more troubling than the materials outlook was the specter of the silk-shirted construction worker of World War I. Nothing, as far as national policy was concerned, prevented contractors from going into the labor market and bidding as high as they wished, for the administration made no attempt to control wages on a nationwide basis until after Pearl Harbor. A spiral seemed inevitable unless Hartman himself could control wages. Practical considerations compelled him to make the attempt. Slim construction budgets made no provisions for wage boosts. Furthermore, lump sum contractors, trying to keep within a prearranged price, would be deprived of workers if fixed-fee contractors "snowballed" wages. Hartman sought to prevent unnecessary increases by placing a ceiling on wages. What he did was to declare the minimum Bacon-Davis rates set by the Department of Labor to be

¹⁷ (1) Draft of Ltr, SW to the Speaker, H R (n.d.). QM 600.1 (Misc) 1940. (2) 54 *Stat.* 873. (3) Memo, Jones for FF Br, 1 Oct 40. QM 600.1 (Ins Risk). (4) Ltr of Instr, Hartman to CQM's, 5 Nov 40. QM 600.1 (CPFF—Policy) I. (5) Constr Div OQMG CPFF Ltr 13, 23 Oct 40. EHD Files. (6) Incl with Ltr, JAGO to Rep Robert L. Doughton, 2 Mar 42. OCE Legal Div Lib. States granting exemptions were: Arizona, Arkansas, Colorado, Illinois, Indiana, Iowa, Kansas, Michigan, Mississippi, Missouri, New Mexico, North Carolina, Ohio, Oklahoma, South Dakota, Utah, Washington, and West Virginia. Those enforcing payment were: Alabama, California, North Dakota, and Wyoming.

¹⁸ (1) Dreyer Interv, 27 Feb 59; Sperl Interv, 18 Jun 56. (2) Col Fred G. Sherrill, *Lumber in the War* (MS), I, p. 5. EHD Files.

the maximum. Fixed-fee contractors who paid higher rates without his approval in writing would do so at their own expense. He thus retained the final, even if he did not possess the initial, say on wage rates.¹⁹

There remained the question of premium pay. Most agreements between contractors and the building trades unions called for time and a half or double time for work in excess of so many hours a week and on Saturdays, Sundays, and holidays. Labor had insisted on these provisions in order to shorten the work week, and contractors normally scheduled construction to avoid paying the almost prohibitive rates. In addition, unions sometimes demanded bonus rates and special concessions for shift work. With time the vital factor in defense, many of Hartman's projects would be working six or seven days a week on multiple shifts. If labor costs were not to be excessive, he had to find a way to escape the usual heavy penalties. Major Jones pointed the way to a solution, by calling attention to the fact that the law required only one premium payment, time and a half for work in excess of eight hours in any one day. With this in mind, Brigham devised a plan he thought fair both to labor and the War Department.²⁰ "We feel," he explained to an official of the Carpenters' Brotherhood, "that due to the emergency . . . the men should be willing to work on a basis of forty hours

a week and eight hours a day for any one man, and at least two shifts a day on straight time. This would permit staggering the crews so as to permit work every day of the week with two shifts and completing the job in time for the troops to move in."²¹ Loving instructed his field officers whenever possible to schedule work to eliminate premiums.²²

Only within certain limits was Hartman free to chart his course, for he had to comply with directives of The Quartermaster General, the Chief of Staff, and the Assistant Secretary of War and to respect the overall policies of the President. These men viewed construction from somewhat different angles. To General Gregory it was but one of several duties. In construction matters he usually followed the lead of his superiors. General Marshall's supervision of the program was, with rare exceptions, exercised through Generals Moore and Reibold. As a rule, the General Staff considered construction from the user's standpoint rather than from the builder's. Judge Patterson, as business head of the War Department, looked upon construction as a most important trust. He was anxious to do his job honestly and well and to avoid any taint of scandal. Roosevelt approached construction questions in a spirit compounded of New Deal liberalism, political realism, and grave concern for national security. Alongside the regular authorities there arose in mid-1940 a new group—advisers, coordinators, and inspectors, agencies and individuals—who were to have great impact upon the building program.

¹⁹ CPFF Form 1, approved by the ASW, 12 Jul 40, art. IX, par. 2.

²⁰ (1) Memo, Bennett for Brigham, 20 Sep 40. EHD Files. (2) Memo prepared by Jones, sub: Notes on Hours of Labor, 12 Sep 40. OCE Legal Div Lib, Instr Re CPFF, I. (3) Incl with Memo, Brigham for Bennett, 9 Oct 40. QM 600.1 (Labor-Gen).

²¹ Memo, Brigham for H. W. Blumenberg, 21 Sep 40. OCE LR Br, Cp Edwards, Gen Corresp.

²² Constr Div OQMG FF Ltr 2 (n.d.). EHD Files.

With the principal new defense agency, NDAC, General Hartman had two chief points of contact. One was the Office of the Coordinator of Defense Purchases, headed by Donald M. Nelson, executive vice president of Sears, Roebuck & Company. Named to this post on 27 June 1940, Nelson had the duties of preventing government bureaus from competing among themselves, advising the President on questions of priorities and allocations, and expediting procurement all along the line.²³ Afterward General Hartman commented, "My relations with Mr. Nelson were always very cordial and he was very complimentary." With Harrison, the member of the commission's staff who was most immediately concerned with construction, Hartman also dealt easily at first. Recalling their association, he wrote, "With reference to Mr. Harrison, he was a very plausible individual . . . I was early informed in my relationship with him that he was Phi Beta Kappa and held an important job in New York City. Furthermore, he represented himself as being a man anxious to do a good job in the program without regard to personal matters."²⁴ Hartman's secretary, Mrs. Mary B. Pagan, referring to this early period, said of Harrison, "He was in our office almost every day."²⁵ While the commissioners themselves seldom worked directly with the Construction Division, they nevertheless helped to guide it. In June, shortly after the President asked NDAC to review important purchases, Hillman began urging adop-



CAPT. LESLIE R. GROVES. (Photograph taken in 1939.)

tion of principles to govern the letting of contracts. It was to be some time before the commissioners agreed what their policies should be.²⁶

July marked the entrance on the construction stage of a man who was to play an increasingly prominent role in the direction of the program. He was Maj. Leslie R. Groves, who became Gregory's personal assistant for construction on the 22d. A 1918 West Point graduate whose career included study at the Engineer School, the Command and General Staff School, and the Army War College; service with troops in the States, Hawaii, and Nicaragua; tours with the Galveston District, the Missouri River Division, the Chief's office, and the War Department General Staff, Groves had a reputation as a doer, a driver, and a

²³ (1) CPA, *Industrial Mobilization for War*, p. 35.
 (2) Smith, *The Army and Economic Mobilization*, p. 530.

²⁴ Statement of Gen Hartman, 5 Jul 55, p. 13.

²⁵ Pagan Interv, 2 Jun 55.

²⁶ *Minutes of the NDAC*, pp. 2-3, 82-83.



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stickler for duty. His new job, as he described it, "was to inspect in the field, spending not over a day at a camp, and seeing just what The Quartermaster General would have seen if he had been there."²⁷ The General Staff had advised Gregory to pick a good officer to check on the progress of construction. Gregory asked for Groves. The two men had been on familiar terms for many years—Groves was the son of an Army chaplain who had been Gregory's close friend—and they had a great affection for each other. To the officers of the Construction Division the appointment came as a shock—a slap in the face, many of them called it. Most of them regarded Groves as an agent for the Engineers, despite the fact that such a role would have been completely out of keeping with his character. Aware of his delicate position, the new

inspector tried to word his reports so that no feelings would be hurt. But the hostility against him was too strong.²⁸ "It was felt at the time," said Thomas, "that this officer's reports were prejudiced and unreasonable and given with the intent to discredit the . . . Quartermaster Corps in order to help the Engineer Corps to take over the Construction Division."²⁹

As far as construction was concerned, one of the most influential figures to emerge during this period was Michael J. Madigan, who became Judge Patterson's special assistant on 23 September. Able jurist that he was, Patterson understood the laws that governed federal construction. In Col. John W. N. Schulz, his Director of Purchases and Contracts, he had, moreover, a faithful exponent of the Army regulations. Nevertheless, both Patterson and Stimson felt the need for an adviser who knew the score in the public works contracting game, someone, as they laughingly put it, who could keep them out of jail. Such a one was Madigan. Senior partner of Madigan-Hyland, engineers of New York City, he was a man of humble beginnings, a onetime water boy, who had become a millionaire by 1940. Having been associated with Robert Moses in the Triborough Bridge Authority and other municipal projects in New York, he was politically astute. He had little formal schooling but was endowed with great native intelligence. He was also somewhat intuitive, playing

²⁷ Col Groves' Testimony, 30 Apr 41. In Truman Comm Hearings, Part 2, p. 533.

²⁸ Intervs with Malcolm Pirnie and Stephen F. Voorhees, 14 Feb 58; Gen Groves, 19 Jun 56; Col Clarence Renshaw, 13 Feb 59; Mr. Sperl, 18 Jun 56; and Col Donald E. Antes, 3 Jun 58.

²⁹ Replies to Questionnaire, Thomas to EHD, 31 May 56.

hunches that frequently proved to be happy. Brought to Patterson's attention by William H. Draper of Dillon, Read & Company and by James V. Forrestal, who had recently become Under Secretary of the Navy, Madigan welcomed the appointment. He viewed it, he later said, as an opportunity to serve the country which had given him the chance to succeed. Before leaving for Washington, he told his partner that their firm would have to forego its share of military contracts.³⁰

Madigan's reception was, on the whole, a warm one. Patterson gave him *carte blanche* to act on construction matters; Harrison expressed the hope that they might work closely together; and General Moore hastened to offer a helping hand. Sociable and informal, the New Yorker made friends easily. Before long he was calling the old-line Regular, Colonel Schulz, by his nickname, "Pop." Madigan's operating method was in a class by itself. He formed no organization and hired no staff. He preferred to look around, talk to people, visit projects, and then retire to his hotel room to mull over his findings and emerge with a full-blown plan to give to Patterson. Thus began what he later termed "the happiest years of my life." There was one discordant note. Madigan and Hartman did not hit it off. Discovering, as he quickly did, that the estimates were far too low, Madigan leaped to the wrong

conclusion—that Hartman was responsible. He put the Chief of Construction down as "a nice old gentleman who was used to being bawled out by colonels' wives" when their furnaces broke down.³¹ Hartman viewed the newcomer with misgivings. He wrote:

My relationship with Mr. Madigan was always on a most guarded basis. I early sized him up as an opportunist who was on the lookout for a profitable contract for his firm in New York City. His name never came to my attention through the Construction Advisory Committee. However, I was certain after having been informed of his relation with General Somervell when that officer was on duty with WPA and relief organizations in New York City that Mr. Madigan was out to feather his own nest Frankly, I did not trust him.³²

Meantime, on 6 September, NDAC wrapped up its statement of contracting principles. While recognizing speed as the prime consideration in placing defense contracts, the commission emphasized that quality and price should also have due weight. Those making awards should take into account not only the contractor's experience and ability but his character and financial standing as well. Keeping in mind effects on the economy and general welfare, they should also try to distribute contracts widely, to prevent congestion of transportation and utilities systems, and to safeguard consumers and labor. Where necessary to achieve defense goals, NDAC approved using negotiation. In a supplementary statement, the commissioners set forth their ideas on labor more specifically. Suggesting that the program might

³⁰ (1) Troyer S. Anderson, *History of the Office of the Under Secretary of War, 1914-1941* (MS), VI, 41-42, 52-53. (2) Interv with Michael J. Madigan, 18 Jun 56. Madigan-Hyland did no work for the War Department during Madigan's term of service in Washington. The firm's participation in the war effort was through contracts with the Navy, the largest of which was for a \$25,000,000 job at Roosevelt Roads Naval Base, Ensenada Honda, Puerto Rico.

³¹ Madigan Interv, 18 Jun 56.

³² Statement of Gen Hartman, 5 Jul 55, p. 13.

serve "to reduce unemployment and otherwise strengthen the human fiber of our Nation," they viewed site selection as a vehicle for social good. Moreover, they insisted on limiting working hours to forty a week until unemployment disappeared. If, in emergencies, projects worked more than forty hours or on Saturdays, Sundays, and holidays, overtime and premium rates would be obligatory. Discrimination because of "age, sex, race, or color" would be taboo, the commissioners declared. Finally, workmen's health and safety would be a grave concern and adequate workers' housing would be a must. Sent by the President to Congress with a message of indorsement on 13 September, the statement henceforth stood as administration policy.³³

To Hartman the statement was a mixed blessing. By affirming the need for negotiated awards, the commission underpinned his position. In the wake of the President's message, Patterson relaxed restrictions on CPFF agreements to permit their use "in all cases where the accomplishment of the national defense program may be expedited or aided thereby."³⁴ Furthermore, the commission's criteria for selecting contractors were almost identical to some Hartman had adopted earlier as a guide for the Construction Advisory Committee. Nevertheless, from the construction standpoint, several of the labor principles were impractical. Even before the statement became public, Secretary Stimson had informed the President that short-

ages of skilled mechanics would force suspension of the 40-hour rule. Whether the policy on premium wage rates would be applicable to construction remained to be seen.³⁵

As the election campaign gathered momentum, the President renewed the pledge he had given in May, that there would be no "cancellation of the great social gains" made under the New Deal. At dedication ceremonies for the Chickamauga Dam on Labor Day, he declared, "We understand now what we did not understand in 1917 and 1918—that the building up of the Army and Navy . . . ought not to result in a waste of our natural resources and at the same time ought not to break down the gains of labor or the maintenance of a living wage." That same day he told a gathering at the opening of the Great Smoky Mountains National Park: "We need not swap the gain of better living for the gain of better defense. I propose that we retain the one and gain the other."³⁶ This theme recurred in the speeches he delivered during the remaining weeks of the campaign.³⁷ In vain did the War and Navy Departments argue against a policy promising "all things to all men—adequate national defense, full employment, higher living standards, the recovery of business, and the consolidation of labor's New Deal gains, in short, both guns and butter."³⁸

³³ (1) *Minutes of the NDAC*, pp. 82-83. (2) H Doc No. 950, 76th Cong, 3d sess, 13 Sep 40, *National Defense Contracts*.

³⁴ Incl (n.d.), with Memo, Schulz for Gregory, 9 Oct 40. QM 400.13 (Without Advertising) 1940-42.

³⁵ (1) Notes of Conf in OCofS, 23 Aug 40. OCS, Misc Confs, 20 May-25 Sep 40. (2) Memo, Brigham for Bennett, 7 Oct 40. QM 600.1 (Labor-Gen).

³⁶ *Public Papers and Addresses of Franklin D. Roosevelt*, 1940, pp. 237, 363, 374.

³⁷ *Ibid.*, pp. 412, 493-94, 520, 547, 549-50.

³⁸ William L. Langer and S. Everett Gleason, *The Undeclared War, 1940-1941* (New York: Harper and Brothers, 1953), p. 182.

At the same time that he refused to sacrifice the New Deal on the altar of national security, the President extolled the progress of defense preparations. Branding as false his opponent's allegation "that the rearming of America is slow," he declared, "We are going full speed ahead." One of the few military programs then well started and, as such, one of the prime targets visible to the opposition, the Army's construction effort came in for a share of Republican criticism and Democratic praise. GOP standard-bearer Wendell L. Willkie charged that new camps would not be ready when troops moved in, and on 30 October Roosevelt countered:

I cannot help but feel that the most inexcusable, most unpatriotic misstatement of fact about our Army—a misstatement calculated to worry mothers of the Nation—is the brazen charge that the men called to training will not be properly housed.

The plain fact is that construction on Army housing is far ahead of schedule to meet all needs, and that by January fifth, next, there will be complete and adequate housing in this Nation for nine hundred and thirty thousand soldiers.

And so I feel that, very simply and very honestly, I can give assurance to the mothers and fathers of America that each and every one of their boys in training will be well housed³⁹

It fell to the Construction Division to redeem the President's promise.

A few days after the passage of the Selective Service Act, Representative Edward T. Taylor told Hartman, "Whatever you do, you will be criticized."⁴⁰

³⁹ *Public Papers and Addresses, 1940*, pp. 500, 151, 517. See also: Memos, Lt Col R. H. Brennan, OCoS, for SGS, 2, 4 Oct 40. OCS, Notes on Confs, 26 Sep 40; Samuel I. Rosenman, *Working With Roosevelt* (New York: Harper and Brothers, 1952), pp. 243-44.

⁴⁰ H Subcomm of the Comm on Appns, 76th Cong, 3d sess, *Hearings on Third Supplemental National Defense Appropriation Bill for 1941*, p. 59.

As time went on, Taylor's prediction seemed increasingly likely to come true. Besieged by numerous and oftentimes conflicting demands, Hartman could not satisfy everyone. But he could and did forge ahead, providing plans, acquiring land, and placing construction quickly under contract.

Engineering

The work of converting appropriations into finished construction began in the Engineering Branch. To this, his largest unit, General Hartman gave the task of establishing the common yardsticks or standards of design that would govern almost every feature of the program—buildings, roads, runways, docks, power plants, trackage, drainage, water supply and sewerage systems, plumbing, lighting, heating, fire protection, installed equipment, and the like. It was Lamphere's duty, as chief of Engineering, first to consider the War Department's policies, the users' requirements, the money allotted, the time allowed, the condition of materials markets, the availability of labor, and the cost of maintenance and, then, with these factors in mind, to develop blueprints, specifications, bills of materials, estimates, and layouts for projects of virtually every type. These plans would go to jobs throughout the country. Although Constructing Quartermasters would have considerable leeway in adapting standards to local conditions, Hartman insisted that fundamental changes be cleared with Washington. He thus preserved the system of centralized design most construction men thought proper.⁴¹

⁴¹ OQMG Office Order 29A, 15 Jun 40. QM 020 (Constr).



FRANK E. LAMPHERE

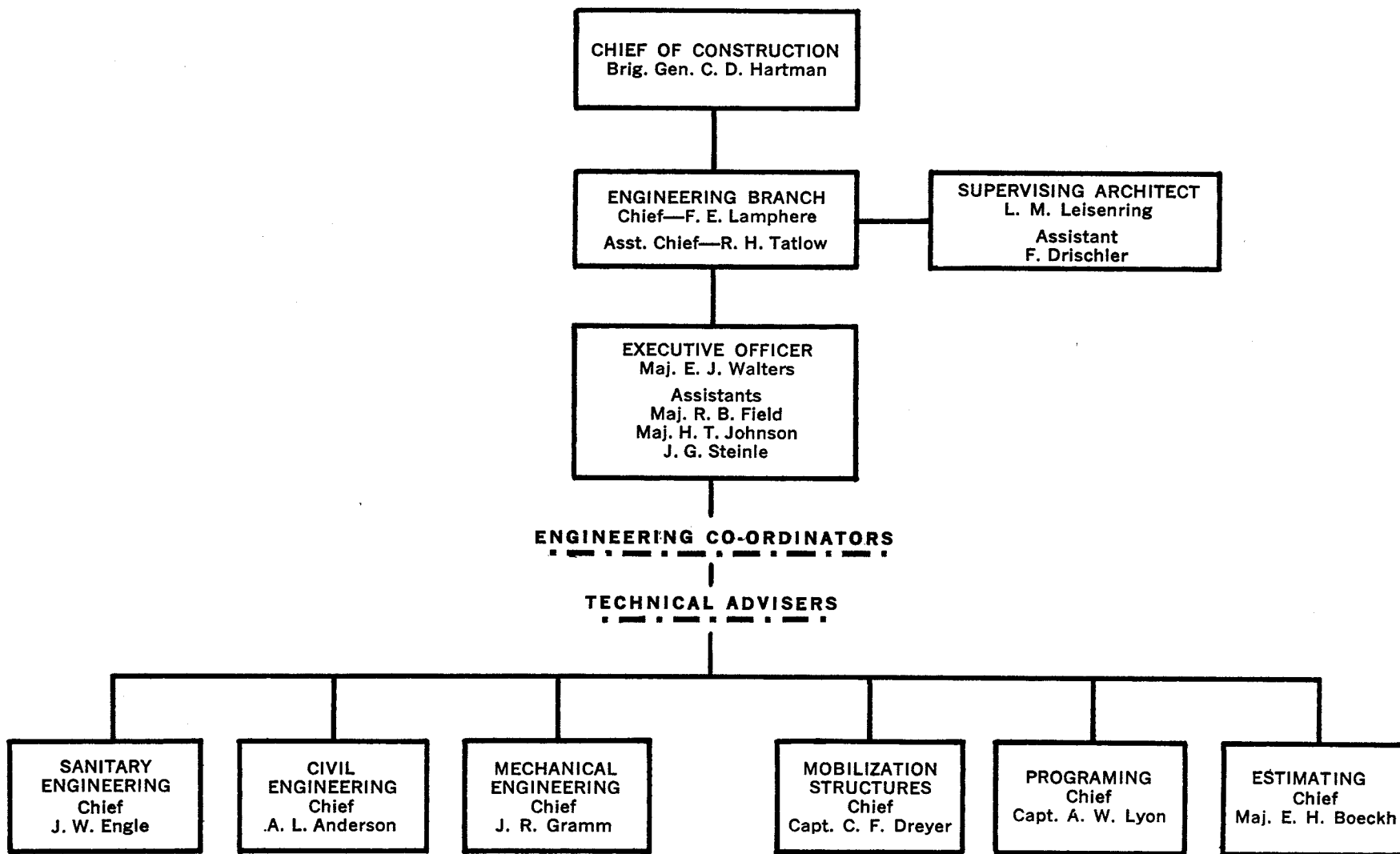
The new Engineering Branch was built upon the solid foundation of the peacetime organization. Consisting during the late 1930's of a few carefully selected officers and some four hundred civilians, the division's technical staff ranked among the best in Washington. During August 1940 Lamphere reorganized this force along the lines of Colonel Gunby's World War I outfit. (*Chart 4*) The main work of design and engineering he assigned to six sections—Civil, Mechanical, and Sanitary Engineering, Mobilization Structures, Programming, and Estimating. To maintain close liaison with his clients, he appointed nine technical advisers: a hospital specialist to work with the Medical Corps, an industrial expert to work with Ordnance, and so on. To expedite the flow of vital information to the field, he named six engineering co-ordinators, each responsible for one

or more corps areas or departments. A majority of the top posts went to division veterans. Maj. Elsmere J. Walters, a construction officer since 1918, became Lamphere's executive. Like Walters, four of the principal civilians, Steinle, Leisenring, Drischler, and Anderson, had been on the job since World War I. Two others, Gramm and Engle, had between them a total of thirty-nine years with the Quartermaster Corps. Though younger than their colleagues, Captains Dreyer and Lyon, both West Point graduates with advanced degrees from leading schools of technology, were seasoned professionals. Most of the advisers and co-ordinators also came from the permanent roster, as did key assistants throughout the organization.⁴² But, although they lent great strength to the emergency effort, the experienced men were too few to cope with the avalanche of work that crashed in on them.

Beginning in July 1940, Lamphere staged a vigorous drive for recruits. Among the first to join up was Richard H. Tatlow III, a junior partner of Harrington and Cortelyou, who became deputy chief. "A very smart, young, peppy fellow," Lamphere said of him. Another early arrival was Arthur L. Sherman, a distinguished sanitary engineer and veteran of the Construction Division of the Army, who agreed to help with the hiring of professional firms. The list grew longer. Frederick H. Warren, a young West Point graduate and former Engineer officer, became chief of co-ordinators. Fred S. Poorman,

⁴² (1) OCE Mil Constr, Comparison of Prewar and Postwar Pers Reqmts, 1 Jun 47. EHD Files. (2) Orgn Chart of Engrg Br, 26 Aug 40. EHD Files. (3) Engrg Br Constr Div OQMG Office Bull 39-1940, 5 Sep 40. Engrg Br Files, Info Office File I.

CHART 4—ORGANIZATION OF ENGINEERING BRANCH, CONSTRUCTION DIVISION, OQMG, SEPTEMBER 1940



an able highway engineer who had been with Lamphere on the Pennsylvania Turnpike project, took over the planning of transportation systems. Maj. Robert B. Field, who had retired in 1938 after more than twenty years as a construction officer, returned as Walters' assistant. A Reservist who headed a nationwide building costs service, Maj. Everard H. Boeckh, came in as chief of the Estimating Section. And there were many, many more. In fact, some four hundred men responded to the call. Small wonder that Lamphere likened the growth of the Engineering Branch to an explosion.⁴³

Just as private architects and engineers first consult their clients, so Lamphere started with War Department policies. Very early in the program, on 27 May 1940, General Marshall announced that G-4 would be the arbiter on construction matters. During the next few weeks, General Moore laid down principles to govern emergency work. Emphasizing the need for speed first, economy second, and serviceability last, he prescribed these rules: hold construction to the minimum; make maximum use of existing buildings; and erect no permanent structures where temporaries will suffice. At new stations hospitals would be temporary, but at old-line posts permanent barracks would serve as wards. Wherever possible, Regulars would double up to make room for Guardsmen and selectees. Additional housing would be of mobilization type, tent camps in the South and cantonments in the North. Both buildings and utilities would have a five-year life. Moore cut requirements to the bone. Family quarters, garages, swimming pools, painting,

landscaping, and all such nonessential features were out for the duration—or so he said at the beginning. While recognizing that munitions plants, depots, and communications systems would have to be at least semipermanent, Moore insisted that there be no embellishments.⁴⁴ Describing to Congressman John Taber what the new Ordnance works would be like, General Wesson said on 25 July: "We will have simple but durable plants. We figure that this emergency is not here today and gone tomorrow, and that these facilities should be built on a basis that would make them available for the next twenty years." Pointedly he added, "There are to be no high-fallutin' gargoyles on these buildings."⁴⁵

Translating Moore's broad policies into detailed plans and specifications was the Construction Division's responsibility. Too vast and too complex for Lamphere's group to tackle alone, the job was shared with private firms hired under negotiated contracts. Industrialists provided many of the basic designs for munitions plants. Nearly every project of any size, whether a plant, camp, airfield, or depot, had its own architect-engineer to fit standard plans and layouts to the site, design utilities and road nets, and supervise construction. Concerns specializing in particular fields of engineering occasionally acted as consultants. For example, two nationally known firms of sanitary engineers, Metcalf & Eddy of Boston and Greeley & Hansen

⁴⁴ (1) Memo, SGS for G-4, 27 May 40. G-4/31751. (2) WD Ltr AG 705 (6-5-40) M-D-M to Chiefs Arms and Servs, 7 Jun 40. G-4/31757. (3) WD Ltr AG 600.12 (6-15-40) M-D-M, 15 Jun 40. G-4/31751.

⁴⁵ H Subcomm of the Comm on Appns, 76th Cong, 3d sess, *Hearings . . . on the Second Supplemental National Defense Appropriation Bill for 1941*, p. 203.

⁴³ Lamphere Interv, 26 Jun 56.

of Chicago, reviewed plans for sewerage and sewage disposal at fifty camps and airfields and advised architect-engineers how best to handle this important aspect of design. All this help notwithstanding, the Engineering Branch carried a heavy load, doing much of the planning itself and overseeing the rest.

When Lamphere took over in July, Major Walters was one jump ahead of the directives, which were starting to trickle in. Since March, when Hartman had begun his salvage operation, the mobilization drawings had come a long way. At the Fort Myer warehouse, a group of forty men, headed by Major Field, had redrawn most of the 700 series plans. Some technical difficulties had yet to be ironed out. One particularly thorny problem involved heating and steam distribution systems for mobilization hospitals, the largest of which would include some eighty buildings connected by 100-foot corridors. Paint shops in motor vehicle repair buildings posed another tough problem: the question here was how to minimize fire hazards in these large wooden structures. Serious complications sprang from the creation of the Armored Force, which needed wider roads and more water than older branches, and radically different layouts as well. By midsummer requests were coming in for extras—guest houses, service clubs, dental clinics, and field houses—which Moore had recently authorized or indicated he might authorize soon. Orders of this kind were comparatively easy to fill, since standard details could often be incorporated into the blueprints. A flock of orders for Air Corps structures—hangars, repair shops, parachute drying towers, bombsight storage buildings, and

the like—were harder to execute, for they required much original design. Challenging though they sometimes were, these purely technical jobs were well within the staff's capabilities. To the men in the crowded drafting rooms, the major stumbling block was the necessity of doing everything so fast.⁴⁶ Meanwhile, their superiors grappled with problems of another sort.

During the fall of 1940, as it drew lessons from military operations abroad, the General Staff continually reorganized the Army. Construction suffered in the process. Looking back on the early months of defense preparations, Nurse reflected: "One of the principal delays in getting off to as early a start as we desired on cantonment construction was due to G-3 being unable to arrive at a definite table of organization. It was constantly being changed."⁴⁷ The size of the infantry company, the basic unit around which most of the camps were designed, was not firmly fixed until construction was under way. Original orders from G-4, issued in June, envisaged a company of 125 men, and Lamphere planned accordingly. He laid out cantonments in blocks consisting of two 63-man barracks plus a mess hall, a recreation building, and a supply room of appropriate size; he left space for a third barracks should the need for one arise. When, on 1 October, G-3 set the company's war strength at 217, he had to redo the layouts to make room for a

⁴⁶ (1) Intervs with Gen Dreyer, 27 Feb 59; W. R. Deininger, 13 Mar 59; S. Sandler, 5 Mar 59. (2) Ltr, Groves to OCMH, 22 Jul 55. EHD Files. (3) Memo, Anderson for Violante, 11 Oct 40. QM 600.1 (Mobl). (4) *ENR*, October 23, 1941, pp. 112-14.

⁴⁷ Ltr, Nurse to OCMH, 9 Mar 55. EHD Files.

fourth barracks and larger messing, recreation, and supply facilities. So late were decisions on the makeup of the new tank companies, and so scant the information as to what they would require, that he could complete no typical diagrams of armored division camps during 1940. These instances were by no means unique. October marked the publication of 35 new tables of organization and equipment; November, of 379; and December, of 30. Tables for units of thirteen types did not appear until January 1941.⁴⁸

Once requirements were clear, planning of camps and cantonments proceeded fairly smoothly, for the Army was on familiar ground; the design of munitions plants was vastly more complicated. Structures had to accommodate complex processes and specialized machinery. Roads, railroads, utilities, shops, and laboratories had to be on a par with those at other large plants in heavy industry. Designs for storage magazines reflected the ever-present danger of explosion. Security against sabotage was always a consideration. Plans on hand at the beginning of the emergency were inadequate. On becoming assistant chief of the Industrial Service, Facilities, in June 1940, Lt. Col. Levin H. Campbell found that the Ordnance Department had very little in the way of factory layouts, equipment diagrams, and building specifications. The situation called into being a three-way partnership of using service, Quartermaster, and industry. The half dozen companies with experience in munitions manufacture served

as design contractors. Engineers from other large industrial concerns, after a period of training at Army arsenals, also planned production units. Lamphere furnished blueprints for magazines, warehouses, shops, administration buildings, workers' housing, transportation systems, and utilities. The using service and the Quartermaster Corps supervised the operation jointly. All plans were subject to review by the Construction Division, but, in order to expedite the work, Hartman told his field officers to start building first and get his O.K. later. Control by the using service was much more rigid. No plan could go to an Ordnance project until the Wilmington sub-office had approved it.⁴⁹ "We are dealing with smokeless powder, with high explosives of all types," Campbell explained. "We are all in fear and trembling" lest the plants "blow up on us due to poor workmanship or poor knowledge or lack of 'know-how'."⁵⁰ Cumbersome though the system was, it produced results. By November Lamphere could start work on standard designs for industrial plants.⁵¹

Although they were then regarded as the least difficult, technically, of all defense projects, the new Air Corps installations produced many headaches. Under the regulations, General Arnold's office could set functional requirements, make initial estimates, and recommend layouts. Actually, the airmen were dab-

⁴⁸ (1) WD Ltr AG 600.12 (6-15-40) M-D-M, 15 Jun 40. G-4/31751. (2) Answers to Questionnaire, Violante to EHD, 25 Sep 57. (3) Dreyer Interv, 27 Feb 59. (4) T/O 7-17, 1 Oct 40. (5) List of T/O's, 1 Jan 41.

⁴⁹ (1) Ltr, Campbell to OCMH, 10 Mar 55. EHD Files. (2) Notes of Conf, Hartman, Campbell, Harrison, *et al.*, 13 Aug 40. QM 095 (Hercules Powder Co.). (3) Ltr, Constr Div to CQM St. Louis OP, 2 Nov 40. 635 (St. Louis OP) Part 1.

⁵⁰ Campbell's Testimony, 26 Feb 41. In May Comm Hearings, Part 1, p. 187.

⁵¹ Ltr, Constr Div to CQM Iowa OP, 5 Nov 40. 635 (Iowa OP) I.

bling in design and had been for years. Col. Frank M. Kennedy, chief of Arnold's Buildings and Grounds Division and himself a graduate engineer, insisted on furnishing plans to the Quartermaster Corps. The Construction Division tried to go along with Kennedy's ideas but could not always do so. Some of his designs, according to Leisenring, had a safety factor of zero. Others, supposedly for temporary structures, incorporated many permanent features and carried estimates reflecting funds available rather than funds required: one drawing for an administration building came bearing a price tag of \$13,260; Lamphere's men figured the cost at \$77,000. Referred to the General Staff, plans of this sort usually met a quick death at the hands of G-4. Efforts by the Air Corps to freeze specifications for runway pavements before service tests were run were blocked by Colonel Reybold. Although helpful at times, Kennedy's incursions into design frequently cost the Engineering Branch a good deal of lost motion.⁵²

Station hospitals proved to be a hornet's nest. Part of the trouble stemmed from General Moore's policy of using permanent barracks as wards, a policy adopted over General Hartman's objections. Barracks, Hartman had pointed out, were seldom near permanent station hospitals, which housed laboratories, clinics, and operating rooms. Besides, conversion would cost far more

than temporary construction. The Surgeon General, Maj. Gen. James C. Magee, also opposed the plan at first, but, pressed by Moore, he at length gave in. Announced on 7 June 1940, the policy drew immediate protests from the field. Nevertheless, G-4 held to the decision for nearly four months.⁵³ Finally, on 20 September, Magee appealed to Moore's successor in G-4, Colonel Reybold. Calling attention to "the patent impracticability of providing appropriate hospitalization in this way," he asked that the policy be revoked.⁵⁴ Reybold agreed, and on the 26th ordered the building of temporary hospitals at permanent Army posts. Much time and engineering effort had been wasted. Sudden jumps in requirements were a further vexation. As the troop distribution changed, many hospitals had to expand. One planned for Fort Custer grew from 350 to 750 beds; one for Fort Bragg, from 200 to 2,000. To make matters worse, in September the General Staff directed Hartman to redesign all hospitals so that they could later be enlarged by 20 percent.⁵⁵

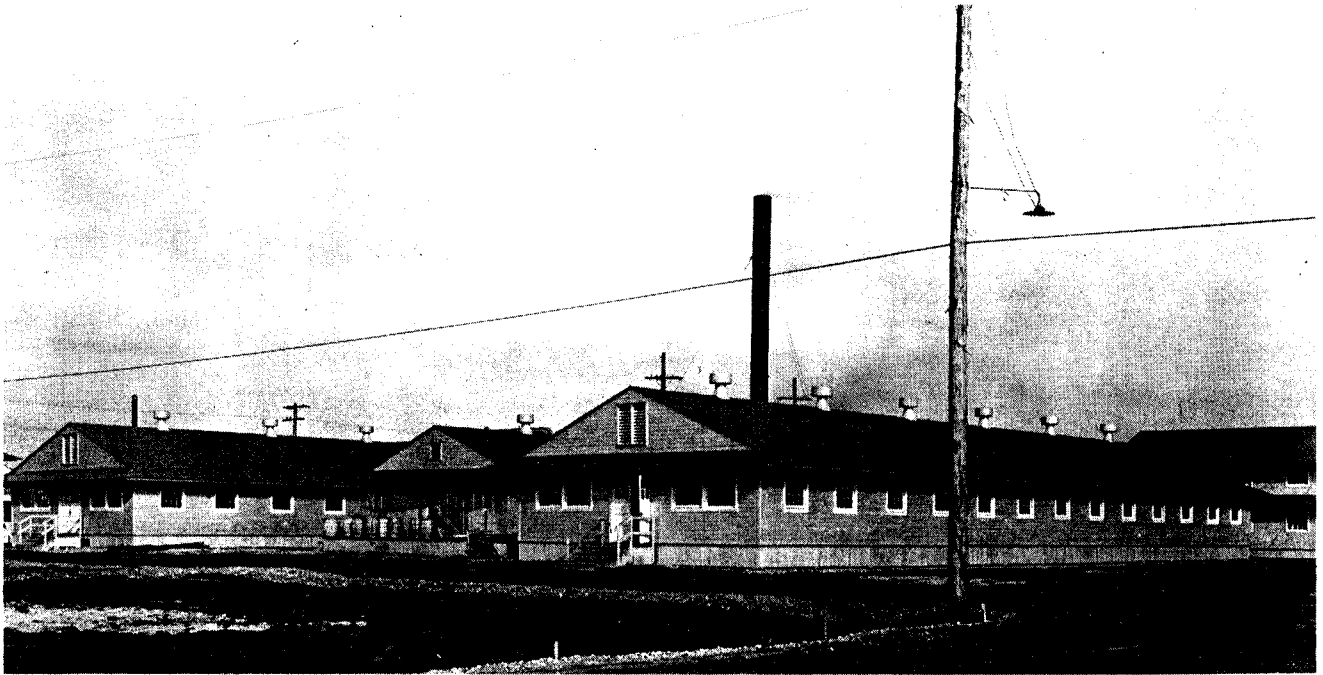
Difficulties notwithstanding, the Engineering Branch delivered the goods. By fall its catalogue of standard blueprints listed barracks for 25, 45, and 63

⁵² (1) AR 95-5, 8 Jun 40. (2) Ritchie Interv, 26 Apr 56; Leisenring Interv, 5 Jun 57. (3) Ltr, CQM Mitchel Fld to OQMG, 8 May 40, and Inds. 600.1 (Mitchel Fld) Part 1. (4) Ltr, OQMG to TAG, 5 Sep 40, and Inds. AG 600.12 (1-23-36) (1) (sec. 1-D Constr Program). (5) D/S, Reybold to TQMG, 9 Sep 40. G-4/30552-4. (6) Ltr, OCofAC to TAG, 1 Nov 40, and Inds. 686 (Airfields) Part 5.

⁵³ (1) Memo, Hartman for G-4, 28 May 40. G-4/31757. (2) Ltr, SGO to TAG, 29 May 40. (3) Memo, Constr Sec G-4 for Moore, 5 Jun 40. Both in QM 632 (Dispensaries) 1941. (4) Clarence McKittrick Smith, *The Medical Department: Hospitalization and Evacuation, Zone of Interior*, UNITED STATES ARMY IN WORLD WAR II (Washington, 1956), pp. 15-18. Cited hereinafter as Smith, *Hospitalization and Evacuation*.

⁵⁴ Memo, Magee for Reybold, 20 Sep 40. G-4/31757.

⁵⁵ (1) WD Ltr AG 600.12 (9-25-40) M-D to Arms and Servs, 26 Sep 40. 600.12A Part 9. (2) Smith, *Hospitalization and Evacuation*, pp. 13-14, 18. (3) QM 632 Cp Custer and Ft Bragg.

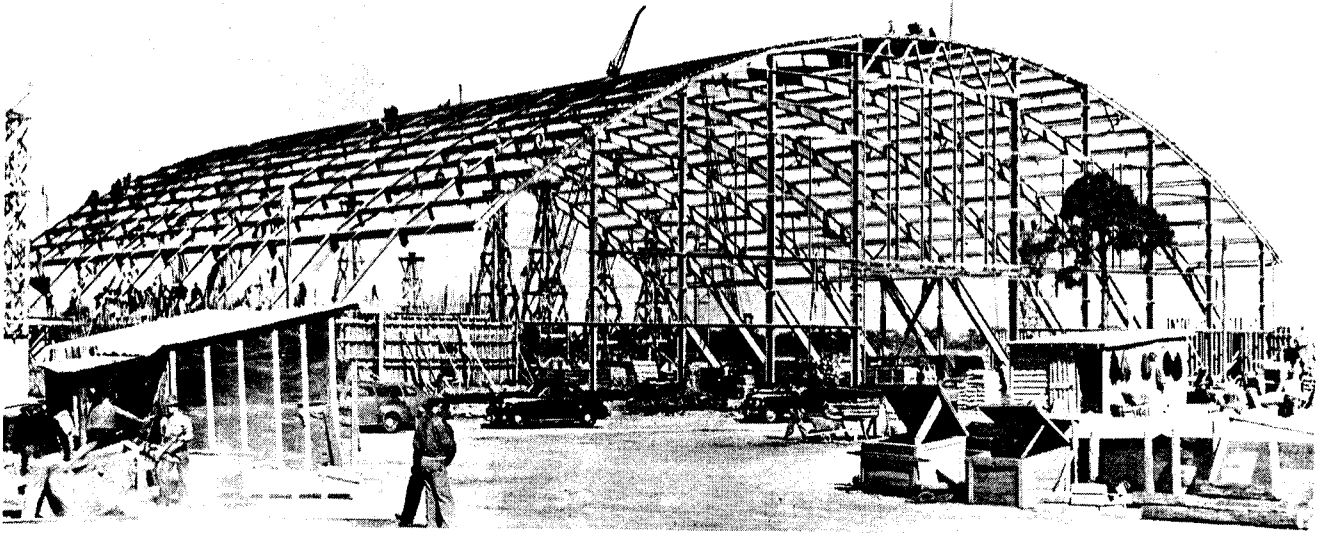


MESS HALL, 1,000-MAN CAPACITY (700 SERIES), CAMP GRANT, ILLINOIS

men, mess halls with seating capacities of up to 1,000, hospitals ranging in size from 25 to 2,000 beds, dispensaries, guard houses, cold storage plants, fire stations, control towers, telephone exchanges, freight terminals, and numerous other structures. Specifications were available for everything from flagpoles to 500,000-gallon gasoline storage and distribution systems. Layouts for most types of ground and air stations were in the hands of Constructing Quartermasters. To be sure, a number of the plans left something to be desired. Thoroughness had necessarily been sacrificed to speed. In the rush to send drawings to the field, some details had gone unchecked. Lack of funds had occasionally dictated the choice of inferior materials; for example, the 55-pound roofing paper specified for the 700 series buildings was the lightest and cheapest on the market. There were, moreover, several gaps in the plans, one of the most

notable being the absence of a layout for armored camps. But, by and large, planning was well and quickly done.

Once he had established engineering standards, Lamphere faced an exacting task in getting them accepted. Interest in the Quartermaster plans was widespread and intense. Producers and suppliers of building materials had a great deal at stake. According to the estimators' rule of thumb, fifty cents of every construction dollar would go for materials. How orders totaling roughly half a billion would be apportioned among the materials industries depended on Quartermaster plans. The various construction trades would also be affected, carpenters benefiting if wood were specified, bricklayers, if masonry. Congress, too, was naturally attentive. In addition, a number of prominent persons were intent upon enhancing the beauty and amenities of the camps. Among them was Mrs. Roosevelt. All these groups



HANGAR CONSTRUCTION, MACDILL FIELD, FLORIDA

watched developments closely. It was a rare engineering decision that failed to call forth comment from one or more of them.

Howls of protest greeted the announcement that the Army would build temporary frame housing. Manufacturers of excluded products promptly attacked the 700 series. The Clay Products Association of the Southwest warned against "*spending* Federal funds in a frenzy of excitement and haste, as was regrettably done during the World War," in other words, against building camps of perishable wood, suggesting instead the "calm, wise, and business-like" procedure of "*investing*" in permanent buildings of brick and tile.⁵⁶ Makers of concrete blocks, cement siding, structural steel, asbestos sheeting, and prefabricated buildings took up the cry for less restrictive designs. The bricklayers union de-

manded work for its members. Congressmen, at the urging of constituents, asked the War Department to reconsider. Advocates of sturdier construction appeared in some quarters of the Army. Lt. Gen. Hugh A. Drum of the Second Corps Area strongly recommended that more durable materials than wood be used in his command. Major Groves entered a plea for heavier roofing and higher grade screening. Dissatisfaction spread. Before long, Captain Dreyer was spending much of his time listening to people who visited Lamphere's office to advocate changes in plans.⁵⁷

As the program unfolded, suggestions multiplied. Senator Rufus C. Holman of

⁵⁶ Ltr, Clay Products Assn. of the Southwest to Sen Tom Connally, 5 Jul 40. QM 652 1922-40.

⁵⁷ (1) QM 652 1922-40. (2) QM 600.1 (Prefabs) 1937-41. (3) Lamphere Interv, 26 Jun 56; Leisenring Interv, 5 Jun 57; Dreyer Interv, 27 Feb 59. (4) Ltr, Stimson to Rep Hatton W. Sumners, 26 Aug 40. SW Files, Constr Work, 251-650. (5) Ltr, Drum to TAG, 30 Jul 40. QM 600.1 (2d CA Tng Cps) 1937. (6) Memo, Groves for Gregory, 3 Aug 40. Opns Br Files, Rpts of Insp.

Oregon, protesting plans for a steel arch hangar, argued the advantages of timber trusses. Mrs. Roosevelt recommended that the streets of the camps be curved. Major Groves, after a visit to Fort Benning one hot summer day, when water consumption exceeded 180 gallons per man, wished to up water allowances and make provision for possible future increases in camp populations. Like many proposals Lamphere received, these were impractical. Because the new hangars were huge affairs, 275 feet across and 90 feet high, timber framing would cost much more than steel. Curved streets, however attractive, would be longer, and therefore more costly and less quickly traversed, than the straight, right-angled roads that had characterized military camps since Roman times.⁵⁸ After studying Groves' suggestion for more ample water supplies, Hartman reminded Gregory: "This office is constantly laboring under demand of higher authority to keep costs to a minimum Though we invariably provide a quite liberal average to provide for any nominal increase, we could not well defend an expenditure of many thousands of dollars to provide a supply for an unanticipated increase of population."⁵⁹ Now and then a suggestion turned up that seemed worth trying. Manufacturers of steel siding and window sash who contended they could beat the price of competing wood products got a chance to prove it. But occasional changes of this kind did little to quiet the general uproar. In fact, lumber men raised a

frightful clamor when steel men bid against them.⁶⁰

To outsiders who challenged its building plans, the War Department presented a united front. Secretary Stimson answered advocates of permanent housing by explaining that camps had to be designed for economy and for speed of erection, and he gave two reasons why barracks of brick, tile, and concrete blocks were out of the question. First, durable materials would cost half again as much as wood; and, second, their use would add 10 to 15 percent to the time needed for construction. Judge Patterson told makers of prefabs that mobilization buildings would be cheaper to construct and to maintain than portables. Hartman offered additional reasons for rejecting durable materials and prefabs. Concrete would be too damp. Prefabs were not available in large quantities and would be difficult to transport. New plans and specifications would be necessary and it would take six weeks to prepare them. Refusals to make changes in the plans were softened by assurances that nearly every product would find a market in the program. General Gregory promised suppliers of brick, tile, and steel that their materials would be in brisk demand for depots, munitions plants, and Air Corps technical buildings.⁶¹ These arguments fell on deaf ears. The protests continued.

The commotion eventually caught the attention of NDAC. As a champion of the view that all should share the

⁶⁰ Dreyer Interv, 27 Feb 59; Interv with Everard H. Boeckh, 21 Jun 59.

⁵⁸ (1) CE 411.1 (Lumber) I. (2) Lamphere Interv, 26 Jun 56. (3) Memo, Groves for Gregory, 3 Aug 40. Opns Br Files, Rpts of Insp.

⁵⁹ Memo, Hartman for Gregory, 12 Aug 40. Opns Br Files, Rpts of Insp.

⁶¹ (1) Ltr, Stimson to Sen Elbert D. Thomas, 28 Aug 40. G-4/31932. (2) Ltr, ASW to Green Lumber Co., Laurel, Miss., c. 20 Jul 40. QM 600.1 (Prefab Bldgs) 1937. (3) Memo, Hartman for G-4, 19 Jul 40. G-4/31409. (4) Ltr, Gregory to Sen Tom Connally, 31 Jul 40. QM 652 1922-40.

benefits of the defense program, the commission could not ignore charges that the Army was excluding certain products. Concern lest orders be unduly concentrated led Harrison to hire one of the country's leading architect-engineers, Holabird & Root of Chicago, to make a comprehensive review of the 700 series plans. On 18 September Holabird & Root submitted a report, praising the Quartermaster drawings but suggesting the possibility of alternate designs based on such materials as terra cotta, cinder blocks, concrete, and asbestos. They also recommended preserving the natural beauty of the sites. Major Nurse hastened to remind the field that typical layouts should follow contours of the land and that trees left standing would camouflage camps and improve their appearance. The commission had acted too late to effect further changes at jobs scheduled for completion in 1940 or early 1941. Time did not permit preparation of new designs for projects already under way. Hartman and Harrison agreed that, for the time being, construction had to proceed on the basis of existing plans.⁶²

Painting interests benefited by the only major change made after 1 September. General Moore originally excluded paint from the cantonment plans in order to help reduce requests to Congress. His dictum provoked emphatic protests. Hartman advised Gregory that "temporary construction should be given protective painting as soon as erected

in order to reduce maintenance costs."⁶³ Col. Stephen J. Chamberlin, chief of the Construction Section, G-4, held the same opinion.⁶⁴ The Painting and Decorating Contractors of America and the Brotherhood of Painters, Decorators, and Paperhangers asked NDAC to intercede. In an appeal to Harrison, George S. Stuart of the contractors' association maintained that no building was complete without paint. Paint, he wrote, made a building habitable, beautified it, made it sanitary, protected it from insects and termites, dampproofed it, and, to some extent, rendered it resistant to fire. On a sentimental note, he added, "It will be a forlorn contrast for our boys to be brought from their painted and decorated homes and offices to Government buildings that are neither protected nor beautified with paint."⁶⁵ Harrison urged the Army to paint. And so did Mrs. Roosevelt. With no funds to pay for such a project, G-4 asked Hartman to see about painting the camps with WPA labor. But before the Army could take any action, the President intervened. On an inspection of Camp Meade, Maryland, he said he wanted the buildings painted. Assured of Roosevelt's backing, the General Staff decided to let contractors do the job using skilled workmen. On 4 November Reybold instructed Hartman to include painting in all contracts for temporary buildings. This directive resulted in the largest order for exterior paint in the history of the paint industry,

⁶² (1) Notes of Conf in Harrison's office on 18 Sep 40, dated 24 Sep 40. QM 652 (Canton Constr) 1941. (2) Ltr, Nurse to Architect-Engineers, 28 Sep 40. QM 652 (Cp McClellan). (3) Memo, Harrison for Patterson, 16 Oct 40. Madigan Files, 101.1 (Canton Design & Constr).

⁶³ Memo, Hartman for Gregory, 20 Aug 40. Opns Br Files, Rpts of Insp.

⁶⁴ Memo, Chamberlin for Col Mallon, 8 Jul 40. G-4/31751.

⁶⁵ Ltr, Stuart to Harrison, 1 Oct 40. Madigan Files, 101.1 (Canton Design & Constr).

945,062 gallons, and a deficit of \$11 to \$12 million for the Construction Division.⁶⁶

The most serious challenge to Quartermaster designs came from within the War Department itself. In a situation where every day counted, Hartman had told Lamphere to complete standards quickly and rush them to the field. Such minor adjustments as were needed could be made locally. This arrangement, however expeditious, was unwelcome to the chiefs of the using services, and particularly to Arnold and Magee, who were reluctant to let their field representatives settle questions of layout and design. The Surgeon General forced the issue early in the program by insisting on numerous changes in standards for mobilization hospitals, plans his office had helped prepare and had once approved. Blueprints were ready for mailing to the field, when Lt. Col. John R. Hall, chief of the Surgeon's Hospital Construction and Repair Division, demanded more toilets, storerooms, and offices. These changes took several weeks. Hall next served notice that he would furnish a layout for each station hospital. Since no two of his layouts proved to be alike, the Engineering Branch had the troublesome job of custom-designing heating systems. The Air Corps' Colonel Kennedy followed Hall's example. As delays developed (the Camp Custer hospital waited a month for plans from Washington), and as confusion mounted (the Orlando Air Base hospital went

through three redesigns), Hartman appealed to G-4. The result was a "freeze order." Declaring most changes unnecessary, the General Staff on 22 August decreed no further revision of the standards without G-4 approval. Typical plans and layouts were to go, without further ado, to be adapted in the field.⁶⁷

Heavy responsibilities devolved on Constructing Quartermasters. Superintending development of detailed layouts, reviewing work of architect-engineers, and helping to plan utilities systems and design footings for typical structures were but some of their technical duties. Hartman directed his field officers to use initiative. When, in their judgment, changes in the standards would speed completion, save money, or improve the finished product, they were to act promptly, forwarding revised plans to Washington as soon as possible. At the same time, Hartman expected Constructing Quartermasters to resist local pressures for changes that might slow progress, increase costs, or lower construction quality. He reminded them that they were answerable only to him.⁶⁸ Seasoned construction officers—Regulars like Colonel Thomas, who left Washington in September to head the Ogden and Vicinity office in Utah, Lt. Col. Lawrence L. Simpson, the veteran CQM at Fort Bragg, and Capt. Carl M. Sciple, the West Point careerist at Springfield Armory—understood their

⁶⁶ (1) Memo, Constr Div OQMG for G-4, 17 Jan 41. Opns Br Files, Painting. (2) Lamphere Interv, 26 Jun 56. (3) Rcd with Memo, Reybold for TAG, 2 Nov 40. G-4/31751. (4) WD Ltr AG 600.12 (11-4-40) M-D-M to Arms and Svcs, 4 Nov 40. 600.12A Part 10. (5) Rpt, Activities of Constr Div, Jul 40-Nov 41, p. 62. (6) Truman Comm *Hearings*, Part 1, p. 175.

⁶⁷ (1) WD Ltr AG 600.12 (8-15-40) M-D to TSG, 17 Aug 40, and Inds. QM 600.1 (Designs). (2) D/F, G-4 to TAG, 19 Aug 40. G-4/31840. (3) G-4/31751. (4) WD Ltr AG 600.12 (8-19-40) M-D to TQMG, 22 Aug 40. QM 600.1 (Mobl).

⁶⁸ OQMG Manual, Supplement to Guide for CQM's, Rev 1940, Covering FF Projects, 27 Aug 40, pp. 1-2. EHD Files.

assignment and knew how to carry it out. Inexperienced project officers had to learn by doing.

Real Estate

Recalling the role of the Real Estate Branch in the defense build-up, Colonel Valliant said, "No one could move until we got the land for them."⁶⁹ The size of the job was unprecedented. On 30 June 1940 the War Department owned about two million acres of land, the accumulation of a century and a half of gradual expansion. Needed at once were eight million more—fourteen times the area acquired in World War I. New Ordnance and Chemical Warfare plants required 263,000 acres; camps, firing ranges, hospitals, and depots, over two and one-half million; airfields and bombing ranges, five and one-third million. At scores of locations in some forty-two states the Army reached out for land.⁷⁰ The Real Estate Branch was under enormous pressure for speed. Colonel Burns, concerned primarily with industrial preparedness, warned Valliant, "If you delay this munitions program, you will be crucified for it";⁷¹ and Colonel Chamberlin, speaking for the General Staff, told him "that no matter how fast he worked, it would not be fast enough."⁷²

In the late spring of 1940 Colonel Valliant made plans for expediting a large-scale effort. His first big problem was personnel. Mirroring its peacetime

mission, the Real Estate Branch numbered only two officers and seventeen civilians. The executive, Capt. Clinton J. Harrold, had ably assisted Valliant in the 200,000-acre program of 1939. Acquisition expert William F. Turton and leasing chief Edward T. Lindner, both veterans of the World War I Real Estate Service, directed experienced staffs. But a mere handful of specialists could not cope with the huge task ahead. In 1918 the Real Estate Service had needed 150 persons for a program far smaller than the one now contemplated. On 10 June 1940 Valliant explained to Colonel Chamberlin how he proposed to muster an adequate force. He envisioned a nationwide network of agents. Although the chief of Real Estate was the only man who could bind the War Department on land transactions, corps area quartermasters had for many years assisted in arranging leases and disposing of surplus property. Their duties would now include some purchasing negotiations. CQM's would also serve as agents. Meanwhile, Valliant planned to expand the Real Estate Branch as rapidly as he could. Men from the central office would handle the most complicated jobs. All agents would report directly to Washington, where Valliant and his top assistants would stand ready to speed to any site where trouble threatened.⁷³

After two decades of meager budgets, the Real Estate Branch was suddenly glutted with funds. Within a 4-month period, Valliant received some \$52,600,000 for land acquisition. During June

⁶⁹ Valliant Interv, 11 Jun 56.

⁷⁰ (1) Rpt, Activities of Constr Div, Jul 40–Nov 41, p. 37. (2) Real Estate PR 33, 30 Sep 41.

⁷¹ Comments of Col Valliant, 24, 28 Mar 55. EHD Files.

⁷² Memo, Chamberlin for Moore, 10 Jun 40. G-4/30881 Sec I.

⁷³ (1) Lt Col David B. Gideon, History of Military Real Estate Program, 1939–1945 (MS), pp. 10, 13. EHD Files. Cited hereinafter as Gideon, Mil RE. (2) Memo, Hartman for Valliant, 25 Jun 40. QM 601.1 (Misc) 1940.

1940 Congress voted \$8,239,824 for ground and air reservations. In July Ordnance turned over nearly \$28,000,000 for plant sites. With passage of the National Guard and Selective Service Acts in August and September, \$16,374,885 became available for land.⁷⁴ Valliant found himself with an embarrassment of riches. "They just dumped the money in my lap," he said later, "and I couldn't get rid of it all immediately."⁷⁵ But impressive though the totals were, they gave little indication of program size, for most of the new acreage cost the army practically nothing.

More than 6 million acres, over three-quarters of all the land required, came from the public domain. Four bombing and gunnery ranges staked out on federal land were the largest in area of all defense projects: Choctawatchee in Florida covered 380,000 acres; Mojave Desert in California, 640,000; Wendover in Utah, 1.5 million; and Tonopah in Nevada, 3.5 million. Smaller but still quite extensive, 60,000 to 90,000 acres each, were several camp sites carved from national forests. Transfer of these public lands to the War Department lightened the burden on the Real Estate Branch appreciably. Purchasing such vast tracts would almost certainly have meant uprooting entire communities and dealing with hundreds of owners. As it was, the custodians, in most cases the Interior and Agriculture Departments, readily agreed to release the lands, insisting only that the Army minimize damage to improvements and take precautions against forest fires. The Quartermaster Corps had merely to arrange details

of transfer and to settle mineral and grazing rights.⁷⁶

Valliant leased four hundred thousand acres, mainly for maneuver areas, training grounds, landing fields, and temporary additions to existing posts. One National Guard camp, Bowie, was on a 90,000-acre site rented from the city of Brownwood, Texas, for one dollar per acre annually; and Camp Roberts, a replacement training center, occupied the 37,000-acre Nacimiento Ranch near Paso Robles, California, leased from its owners for \$125,000 a year. These were exceptional cases. Most of the leaseholds were smaller—25,000 acres or less; and half of them contained fewer than 1,000 acres apiece. From Valliant's viewpoint, leasing offered marked advantages. First, lessors were, on the whole, a willing group. Only once did he have to condemn in order to lease. Second, for a short-term program, it was more economical to lease than to buy. Rents paid during 1940 ranged from 7 to 15 percent of appraised values. Third, leasing avoided conflicts with local authorities over removal of properties from tax rolls. Fourth, it eliminated the problem of eventually disposing of surplus land. Finally, corps area quartermasters could do much of the work.⁷⁷

But leasing was often impossible. During World War I Ordnance had built a number of plants on leased land. Subsequent forced sales of these valuable structures at junk prices had caused the

⁷⁴ (1) Real Estate PR, 21 Feb 41. (2) 601.4 SWD. (3) Ltr, Harrold to QM Ninth Corps Area, 6 Nov 40. 601.1 (9th SvcC) I.

⁷⁷ (1) Real Estate PR, 21 Feb 41, pp. 28-31. (2) 1st Ind, 22 Jan 41, on Ltr, QM Ninth Corps Area to TQMG, 17 Jan 41. 601.1 (9th CA) II. (3) Ltr, RE Br Constr Div OQMG to USW, 28 Feb 41. USW Files, 601 (Land Acquisition).

⁷⁴ 54 Stat. 350, 599, 628, 705, 872, 958, 1030.

⁷⁵ Valliant Interv, 11 Jun 56.

Comptroller General to prohibit permanent improvements on privately owned land. Because of this prohibition and because many desirable sites were available only through purchase, Valliant had to buy more than one and one-third million acres.⁷⁸

Two courses were open to him: negotiate with the owners or take the land by condemnation. While the power to condemn was a potent weapon, he preferred not to use it. A hate-provoking action, condemnation was often also slow and costly. When the government filed a declaration of taking, the normal procedure in such cases, it turned control over to the court. Although title vested in the United States as soon as a declaration was filed and the amount of estimated compensation was deposited with the court, it was the judge who decided when the government could take possession. Under the Imminence of War Statute enacted during World War I, the government might in an emergency take possession immediately upon filing a petition in condemnation and giving a perimeter description of the land; but title did not pass to the United States until final settlement. Where dockets were crowded and other important cases were awaiting trial, condemnation hearings were frequently postponed. Moreover, in finding fair values, local juries tended to favor their neighbors' claims; as recently as the spring of 1940, a Massachusetts jury had awarded \$1,000,000 for land appraised at \$300,000. Court charges and interest due owners added to the expense of con-

demnation. Hence, Valliant sought to reach voluntary agreements whenever titles were clear.⁷⁹ By accepting the idea that the government would "pay somewhat more than the going price . . . in view of the fact that the owners will be immediately dispossessed and, therefore, put to great inconvenience," he avoided mass condemnations at all but a few sites.⁸⁰

Whether he bargained with owners or took them to court, Valliant needed large numbers of surveyors, appraisers, and attorneys to assist him. Efforts to recruit such men were, for the most part, unavailing. The Civil Service Commission was unable to furnish lists of eligibles, and federal salary scales were too low to attract many real estate experts. By 1 November only nine civilians had joined the Washington staff, and several of them were clerks. Locating officers with real estate experience was even harder. During 1940 Valliant found but one, a Reservist who had worked for the Interstate Commerce Commission. Corps area and Constructing Quartermasters experienced similar difficulties. Valliant had to look elsewhere for help. The Soil Conservation and Forest Services, the Farm Credit Administration, the Home Owners' Loan Corporation, and other federal agencies agreed to furnish personnel. Attorneys from the Department of Justice conducted many closings of direct purchase cases. These assistants rendered valuable service, but some of them were too accustomed to

⁷⁸ (1) *Blossom Report*, pp. 273-74. (2) 1st Ind., 20 Dec 40, on WD Ltr AG 600.12 IR (12-9-40) M-D to JAG, 11 Dec 40. QM 600.3 (Funds) 1936. (3) Real Estate PR, 21 Feb 41.

⁷⁹ (1) 46 Stat. 1421. (2) 40 Stat. 241, 518. (3) Memo, Chamberlin for Moore, 10 Jun 40. G-4/30881 Sec I.

⁸⁰ Memo of Agreement between Valliant and Chicago Title & Trust Co., 10 Sep 40. 601.1 (Kankakee OW) III.

the leisurely pace of peacetime activities to act with the speed demanded.⁸¹

Valliant turned in his predicament to private brokers. The Atlas Powder Company, operator for the shell-loading plant at Ravenna, Ohio, helped point the way. Early in August 1940, with the Ordnance Department's approval, Atlas engaged the Bankers Guarantee Title & Trust Company of Akron to buy the Ravenna site. A 5-percent commission on the gross sale price was payable by the vendors. Later that month, after running into difficulties, Atlas assigned the Bankers Company contract to Colonel Valliant. Under his direction, the Akron firm produced quick results. Seeing in the brokerage arrangement a possible means of relieving his overburdened staff, Valliant consulted Turton, who advised him that a similar expedient had worked in World War I. During the next three months, with the help of Ordnance, NDAC, the Baltimore and Ohio Railroad, and local chambers of commerce, Valliant chose brokers for eight of his most urgent jobs—six Ordnance projects and two camps—involving a total of 1,692 tracts and 151,274 acres. He offered the brokers substantially the same terms Atlas had given the Akron concern: seven would receive commissions of 5 percent; the eighth, who undertook an unusually large and complicated job at Jefferson Proving Ground, Indiana, would get 6.5 percent. By hiring brokers Valliant obtained much-needed expert assistance. If his agreements with them resembled

cost-plus-a-percentage contracts, recently prohibited by Congress, he was unaware of it.⁸²

Knowing that advance publicity would encourage speculation and send real estate prices soaring, Valliant proceeded cautiously. Until his agents could enter an area, take a number of options, and stabilize land values, he fought shy of politicians and reporters. He did his traveling by day coach to lessen the chance of anyone's learning who he was or where he was going. Hartman, Patterson, and Reybold helped throw a cloak of secrecy around new locations. Nevertheless, leaks occurred. One Ohio congressman announced the coming of the Ravenna plant at a public meeting. A series of untimely rumors was traceable to Chester Davis in NDAC. Local officials and business leaders in whom site boards had confided also passed the word along. During August and September 1940, leaks cost the Army an estimated \$500,000. While Hartman and Valliant demanded greater secrecy, Stimson, in response to outside pressure, chose a very different course. Early in October he announced that sites would be made public at the time of their selection.⁸³

News of the Army's coming provoked intense excitement. Eight-column banner

⁸² (1) 601.1 (Ravenna OW) I. (2) Outline Data on RE Brokers, prepared in Constr Div OQMG, Apr 41. EHD Files. (3) Memo, Gregory for Patterson, 23 Dec 40. QM 601.1 (Misc) 1940.

⁸³ (1) Valliant Interv, 11 Jun 56. (2) Memo, Hartman for Wesson, 27 Aug 40. (3) Memo, Patterson for Rutherford, 16 Aug 40. Last two in QM 600.1 (Ord) 1939-40. (4) D/S, G-4 to G-2, 5 Sep 40. G-4/30881 Sec II. (5) Memo, Wilson for Reybold, 6 Sep 40, and notation thereon. 624 Part 1. (6) Tel Conv, Campbell and Groves, 10 Dec 40. Opns Br Files, Ord. (7) WD Press Release, 7 Oct 40. 601.1 (Weldon Spring) I.

⁸¹ (1) Gideon, Mil RE, pp. 13-16. (2) Tab, Civilian Pers in Constr Div, 1 Nov 40. Opns Br Files, Pers. (3) Orgn Chart, Constr Div OQMG, 11 Dec 40. EHD Files. (4) Notes, Conf of Corps Area QM's, 29 Jan 41, pp. 75-82. QM 377 (CA QM) 1940.

headlines on page one of the Joliet *Herald-News* hailed the decision to locate two plants, Kankakee and Elwood, in northeastern Illinois. According to the paper, a boom was on the way. Farmers would be well paid for their land. Jobs would be plentiful and wages high. Within six months to a year, the *Herald-News* prophesied, the population of Will County would increase from 114,000 to 154,000, and 8,000 new homes would go up in Joliet alone. In community after community, optimism ran high. People on relief were jubilant at the prospect of working again. Chambers of commerce looked forward to a period of prosperity. But though many hoped to gain by the presence of military installations, other expected to lose. Taking thousands of cultivated acres would produce a major upheaval. In the rich agricultural areas of Ohio, Indiana, Illinois, and Missouri, 4,000 farm families would be uprooted. Whole villages faced extinction as the Army threatened to take the land on which they stood. Foreseeing much hardship, these people refused to give in without a fight.⁸⁴

While townsfolk rejoiced at their good fortune, the countryside was in a ferment. Farmers held mass meetings, drafted petitions, and sought injunctions. Delegations went to Washington. Men wired their congressmen, and women wrote to Mrs. Roosevelt. The protests evoked a pathetic picture.⁸⁵ "Some four hundred farm people will be thrown out in Iowa

winter weather," read one appeal to Vice President-elect Henry A. Wallace. "Stock, machinery, and household goods will have to be sacrificed. We are heart broken and desperate. Can't you help us?"⁸⁶ "Tragic, if not stunning," an Illinois group described the blow.⁸⁷ Many urged the Army to take waste lands instead of cultivated acreage. But the War Department argued military necessity. In answer to a plea that he spare an old homestead, Patterson wrote: "I agree with you that it is hardly a pleasant thing to give up a home that one's family has occupied for nearly eighty years, but it is hardly a pleasant thing to have to build an ammunition plant. Ours, unfortunately, is a world in which such things are necessary."⁸⁸

At the first signs of unrest, Colonel Valliant hastened to the scene. Talking to the owners, he was understanding but firm. While he sympathized with the farmers and expressed sincere concern for them, he made it clear that individual interests must give way to the national interest.⁸⁹ Complimenting the Real Estate chief on a speech to an angry gathering at Wilmington, Illinois, a judge of the State Court of Appeals said, "You handled it beautifully and left those

⁸⁶ Ltr, Mabel L. Moore, West Burlington, Iowa, to Henry A. Wallace, 8 Nov 40. 601.1 (Iowa OP) I.

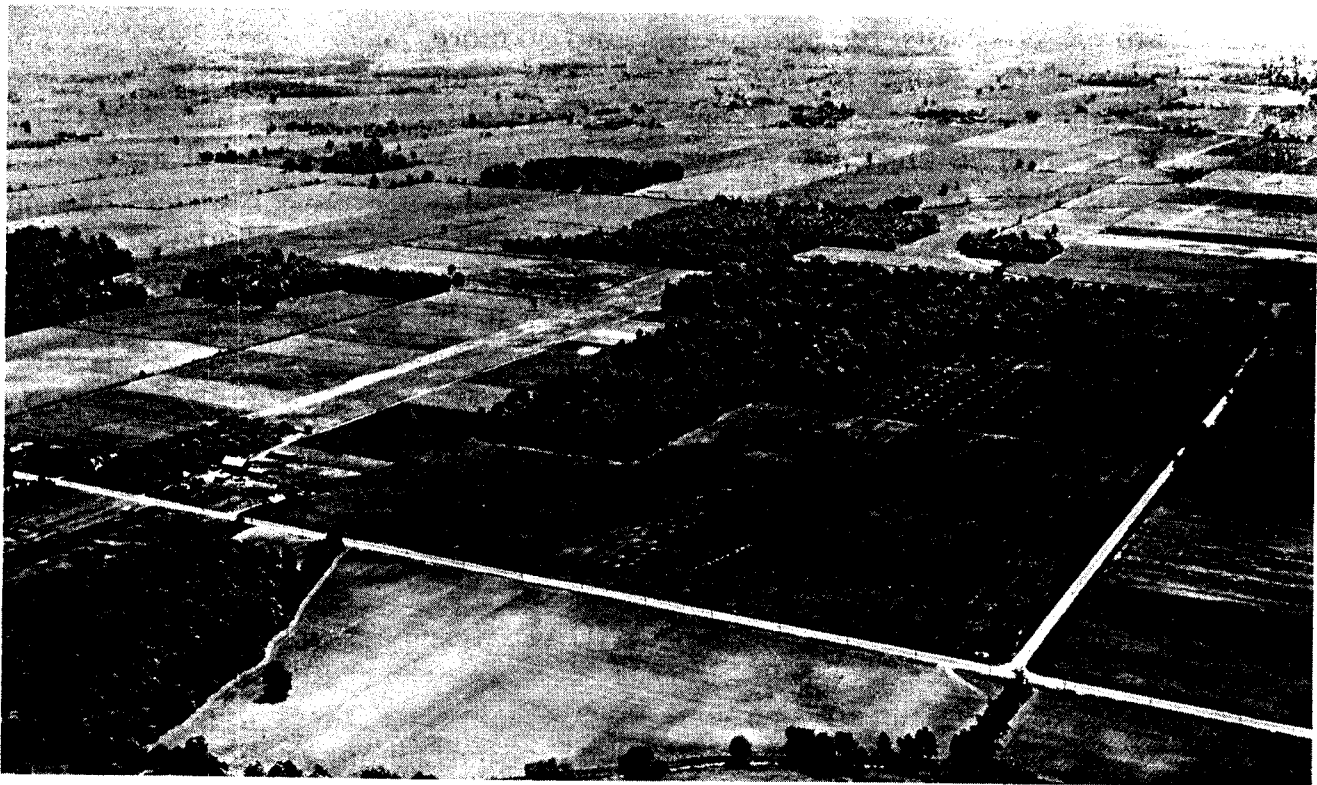
⁸⁷ Ltr, R. G. Richards *et al.*, Wilmington, Ill., to Sen Scott W. Lucas, 25 Sep 40. 601.1 (Kankakee OW) I.

⁸⁸ Ltr, Patterson to Mrs. C. E. Woolley, South Bend, Ind., 2 Nov 40. QM 601.1 (Kingsbury OW) 1940-41.

⁸⁹ (1) Memo, Valliant for Gregory, 29 Aug 40. 601.1 (Ravenna OW) I. (2) Ltr, Valliant to Miss Bessie A. Lee, Anniston, Ala., 11 Dec 40. 601.1 (Anniston OP) I. (3) Ltr, Mrs. Walter H. Miller, Middletown, Iowa, to the President, 14 Nov 40. 601.1 (Iowa OP) I. (4) Ltr, R. Newton McDowell, Kansas City, Mo., to . . . , 24 Oct 40. 601.1 (Weldon Spring OW) I.

⁸⁴ (1) Joliet *Herald-News*, September 25, 1940. (2) Comments of Col Valliant, 24, 28 Mar 55.

⁸⁵ (1) Constr Div OQMG, RE Br, Annual Rpt, FY 1941, p. 8. Gideon File, 6A3. (2) 601.1 Ravenna OW, Kankakee OW, Anniston OD, Iowa OP, Jefferson Pr Grnd, Ft Knox, and others. (3) Memo, Groves for Gregory, 23 Sep 40. Opns Br Files, Convention in Chicago.



SITE OF PLUM BROOK ORDNANCE WORKS, OHIO

farmers in a much better frame of mind when they left the meeting than when they came.”⁹⁰ Valliant made no extravagant promises, but with natural humanity, he frequently succeeded in calming the farmers down.

What proved more difficult was bringing them to terms. Arriving at the Army’s newly selected sites, Quartermaster agents were met by demands for high prices. Some claims, though large, were reasonable. Many sites, particularly those for munitions projects, included prize agricultural land. Indeed, the features that made for good industrial tracts—firm, level ground, ample water, and nearness to roads and railroads—also made for profitable farms. But many asking prices were clearly out of line;

some were as much as thirty times appraised values. Perhaps the greatest stimulus to high prices was the Army’s insistence on immediate possession. One attorney reported sharp advances when farmers began “to realize the enormity of the task” of moving within thirty days.⁹¹ Rumors that speed was all-important and price was no object caused many owners to expect much more than they had ever before dreamed their properties were worth. Scalpers made a bad situation worse. Lashing out against the activities of “land option sharks,” a Quartermaster spokesman said, “When the owner whose land we take over attempts to move into the adjoining area, he finds the prices there have been skyrocketed and he is unable

⁹⁰ Ltr, Judge Frank H. Hayes, Springfield, Ill., to Valliant, 25 Sep 40. 601.1 (Kankakee OW) I.

⁹¹ Ltr, Charles S. Smith, Akron, Ohio, to Valliant, 10 Sep 40. 601.1 (Ravenna OW) I.

to buy at a fair price.”⁹² At several places Valliant cut costs by redrawing site boundaries to avoid payment of severance damages and exclude expensive buildings and commercial properties. Generally, he told his agents to try to satisfy the owners but to remember that Uncle Sam was not Santa Claus.⁹³

Reviewing options taken in the field, Valliant and Turton noted a startling development. Not only were valuations high, but sums had frequently been added to cover “disturbance damages.” A father was to get \$2,000 for training his blind daughter to find her way around a new farm. A congregation was to receive \$1,000 for the trouble of relocating its church; the preacher, \$695 for lost salary. A dairyman had been promised extra compensation for driving his cows a few miles down the road—he said it disturbed their milk production. Though some claims were farfetched, others stemmed from genuine hardship.⁹⁴ “In almost every instance,” one agent wrote, “we are purchasing somebody’s home, which means disruption of their family life, moving immediately from the premises, disposing of large quantities of livestock, farm machinery, feed, and other property, storing of household goods, renting of new quarters for living, etc. All of these inconveniences are considered by us.”⁹⁵ Whether losses were real or fancied, there was no legal basis for such claims. The government was

obliged to pay fair market value, no less and no more.

The source of the trouble was soon clear. Valliant learned that NDAC had asked the Attorney General for a ruling in favor of disturbance damages and had been refused. Correspondence on the subject between Chester Davis and professors at the University of Illinois came to light. Reports from the field told a fuller story. From agents in Ohio, Indiana, Illinois, Missouri, and Iowa came word that Davis’ top assistants, Arthur C. Ringland and John B. Hutson, had been out talking to the farmers. Lists of disturbance factors, compiled by NDAC, were passing from hand to hand. Indorsed by the Advisory Commission were claims for the following: rent for family quarters until new farms could be found; storage for equipment; housing for livestock; decreased milk production while herds adjusted to new surroundings; unused pasturage; unrealized benefits from fertilizing, plowing, and seeding; value of labor expended in moving; and losses of various types, including those sustained in forced sales of animals and machinery. Representatives of the Farm Bureau, the CIO Farmers Union, and the Farm Security Administration supported these demands. At some projects, agents refused to countenance disturbance damages, but at others, pressure was so extreme that they allowed such claims. Inclusion of disturbance items was increasing option prices as much as 40 percent.⁹⁶

⁹² Testimony of John J. O’Brien, 18 Mar 41. In *May Comm Hearings*, Part 1, p. 252.

⁹³ Gideon, Mil RE, p. 17.

⁹⁴ Memo, Constr Div OQMG for Patterson, 21 Mar 41. USW Files 601 (Land Acquisition) (Disturbance Damages).

⁹⁵ Ltr, A. J. Cockrell, Burlington, Iowa, to Valliant, 6 Dec 40. 601.1 (Iowa OP) I.

⁹⁶ (1) Memo, Constr Div OQMG for Patterson, 21 Mar 41. USW Files, 601 (Land Acquisition) (Disturbance Damages). (2) Memo, Ringland for Rcd, 17 Oct 40. 601.1 (Kankakee OW) I. (3) Memo, Turton for Valliant, 21 Oct 40. 601.1 (Elwood OP) I. (4) Memo, Chief RE Br to Chief Constr Div OQMG, 11 Apr 41. Opns Br Files, House Investigation.

Valliant took what steps he could to force prices down. He returned options containing disturbance items, unsigned. Valuations up to \$90 an acre he usually let go unchallenged, since time did not permit careful investigation of every parcel; but he checked larger claims against assessments. He used various means to bring the owners around. His agents tried persuasion and take-it-or-leave-it offers. His policy was to "give the farmers a break," and whenever possible to let them graze cattle, cut timber, harvest crops, and salvage improvements after the government took possession. Nevertheless, some owners remained obdurate. At fourteen projects Valliant condemned all or part of the site. Among the larger tracts taken in this way were 1,678 acres for the Utah General Depot, 2,080 acres for the Denver Ordnance Plant, 16,246 acres for the Fort Dix target range, and 31,600 acres for expansion of Fort Jackson. A tense situation at the Ordnance project near Burlington, Iowa, received more delicate handling. Options on this site, taken by A. J. Cockrell, a local realtor working under a brokerage arrangement, showed an overall cost of \$4 million, double the amount originally estimated. Farmers in the area, having just lost a furious fight to keep the Army out, were in an ugly mood. Warned that riots might occur if the government condemned, Valliant hired John J. Wagner of Cedar Rapids to make an independent appraisal.⁹⁷ From Burlington, Wagner reported "that even a slight hint that our

conclusions might be less than option prices would be . . . dangerous." He nevertheless agreed to see the job through. In reappraising the site, Wagner set prices at "the highest level of value which . . . could, in any circumstances, be justified."⁹⁸ But Valliant feared that these prices would be unacceptable and established new ones averaging 18.5 percent above Wagner's appraisals. Cockrell was able to renegotiate his options on this new basis, thereby cutting \$650,000 to \$700,000 from the cost of acquisition and possibly preventing unfortunate incidents.⁹⁹

Disappointed and worried farmers took their troubles to NDAC's Agricultural Division, bombarding Davis with complaints. Visits from delegations, long-distance calls, and numerous letters impelled the veteran farm leader to investigate. Since many of the early protests were from the Kankakee-Elwood area, he began there.¹⁰⁰ By 17 October his assistant, Ringland, had completed a report. Criticizing Raymond E. Herman, the Chicago broker in charge of acquisition, Ringland wrote: "A number have complained that they were informed in a ruthless manner, 'You might as well stop that plowing because the Government is going to take possession in thirty days.' This caused a great deal of emotional distress and misunderstandings that still exist." He went on to deplore Valliant's use of city men and Herman's dealings with tenants. Calling the tenant

⁹⁸ Ltr, Wagner to Valliant, 13 Dec 40. 601.1 (Iowa OP) I.

⁹⁹ (1) Memo, RE Br for Constr Div, 17 Feb 41. USW Files, 601 (Land Acq). (2) Memo, RE Br for Constr Div, 4 Feb 41. 601.1 (Iowa OP) I.

¹⁰⁰ Ltr, Hutson to May, n.d., and Incls. In May Comm *Hearings*, Part 1, pp. 252-57.

⁹⁷ (1) Valliant's Testimony, 15 Jan 41, Exhibit B, p. 36, with Memo, TIG for USW, 19 Feb 41. IG 333.9 (Jefferson Pr Grnd). (2) Valliant Interv, 11 Jun 56. (3) Real Estate PR, 21 Feb 41, pp. 26-27, 21-22, 13-14. (4) 601.1 (Iowa OP) I.

"the forgotten man," he explained:

In all cases the broker has been dealing only with the owner, informing him that the tenant must look to the owner for the settlement of his rights. In the purchase price, however, it has been the general practice to be generous and to include . . . an additional amount to compensate the tenant. But this leaves it to the owner to decide how much he will pass on to the tenant, and in some cases compensation for the tenant has been forgotten completely or is quite inadequate Some tenants, knowing their rights, are ready to file suit to recover adequate damages from the owner. Such action would cloud the title and make for delay in the settlement of the project.

Ringland concluded by recommending, one, that the Army safeguard tenants' interests, two, that it recognize disturbance factors, and, three, that federal appraisers replace private realtors.¹⁰¹

The first point was quickly settled. On 18 October Ringland, Hutson, and Turton agreed to a procedure that would protect the tenants. Before taking an option, Quartermaster agents would insist that owner and tenant come to an agreement. The tenant would be paid his share directly, not through the owner as before. But there was no accord on points two and three. On 23 October and again on the 25th, Davis brought these questions before the Advisory Commission. With his colleagues' approval, he called a conference of representatives from various federal land agencies and laid his case before them. Upholding Davis' views, the conferees advised the War Department in effect: dismiss the brokers, turn the projects over to us, and thus ensure that owners and tenants will receive sympathetic treatment and

that purchase prices will include disturbance damages.¹⁰² On 5 November Patterson issued a statement. The Quartermaster General would try "to secure the good will of the community to the maximum extent possible, consistent with fair prices and the availability of the land at the time and in the location needed," and "to cause the least hardship and inconvenience." Patterson made no mention of brokers or disturbance damages. In fact, he did little more than set the War Department's seal on Colonel Valliant's policies.¹⁰³

Renewing the attack, Davis concentrated his fire against the brokers. Under mounting pressure, Patterson turned to The Quartermaster General for advice. Early in December Gregory replied with a defense of the brokerage arrangement. While conceding that city brokers might be unfamiliar with farm problems, he pointed out that they almost invariably hired local men to help them. He went on to state that the brokerage system had saved money by cutting overhead costs from the 8 percent averaged by government departments to 5 percent. He further argued that because private realtors did "not have to conform to established and sometimes time-consuming practices of the Government," they could work more swiftly than federal agents. Gregory nevertheless gave ground. "Hereafter," he wrote, "this office will make increased use of the facilities of other Government agencies and will not resort to special agents on a commission basis except in a very exceptional

¹⁰¹ Memo, Ringland for Rcd, 17 Oct 40. 601.1 (Kankakee OW) I.

¹⁰² (1) Memo, Turton for Valliant, 21 Oct 40. 601.1 (Elwood OP) I. (2) *Minutes of the NDAC*, pp. 104, 107. (3) Incl with Ltr, Hutson to May.

¹⁰³ Memo, Patterson for TQMG, 5 Nov 40. QM 601.1 (Misc) 1940.

case, in which case your office will first be consulted." Gregory's answer failed to satisfy Patterson, who was beginning to worry on another score—that the brokerage contracts might fall within the definition of cost-plus-a-percentage. On 26 December he prohibited further use of brokers without his express approval.¹⁰⁴ At the same time he explained to Davis that "if real estate agents were used on future projects the fee would be fixed and not related to the purchase price of the land."¹⁰⁵ When, in late December, Valliant wished to hire a private realtor for the Plum Brook Ordnance Plant in Ohio, Patterson agreed on condition that the broker receive a lump sum agreed to in advance.¹⁰⁶

Having won a partial victory in the matter of the brokers, Davis returned to the subject of disturbance damages. For a time Colonel Valliant gave in to some extent, directing his agents to allow for tangible damages though not to itemize them in the options. Pressing his advantage, Davis next demanded that the War Department earmark part of its next appropriation for disturbance payments. Valliant opposed the plan. Asked for an opinion, the Attorney General again pointed out that Davis was on shaky legal ground and suggested another approach—give the Department of Agriculture relief funds to assist in the relocation of needy families. The result was that the farm security agency took over the handling of disturbance cases

and the Real Estate Branch went back to rejecting damage claims.¹⁰⁷

While he referred to Davis as "my bête noire," Valliant had other critics to content with. Ordnance was dissatisfied with his progress. According to the commanding officer, contractors at Kankakee had waited three weeks while the Real Estate Branch trifled with options. A spokesman for General Wesson maintained that slowness in obtaining land had held up the Iowa shell loading plant one month. Valliant denied delaying construction at any project and stated that many difficulties were traceable to Ordnance itself. Declaring that the Real Estate Branch was often the last to learn of impending projects, he cited the Wolf Creek plant at Milan, Tennessee, as an example. Ordnance first requested authority to build the plant on 14 November, but Valliant heard nothing of the matter until 27 December, when he got orders to acquire the tract. In the six weeks that elapsed before he learned of Ordnance's intentions, he might have completed preliminary work.¹⁰⁸

Despite the hue and cry that accompanied acquisition, Valliant's record was a creditable one. By late December 1940

¹⁰⁴ (1) Memo, Gregory for Patterson, 4 Dec 40. (2) Memo, Patterson for Gregory, 26 Dec 40. Both in 601.1 I.

¹⁰⁵ Incl with Ltr, Hutson to May.

¹⁰⁶ (1) Memo, Gregory for Patterson, 30 Dec 40. (2) Memo, Gregory for Patterson, 31 Dec 40, and approval thereon. Both in 601.1 I.

¹⁰⁷ (1) Incl with Ltr, Ringland to Turton, 26 Dec 40. 601.1 I. (2) Ltr, Valliant to Ostendorf-Morris Co., Cleveland, Ohio, 7 Jan 41. 601.1 (Plum Brook OW) I. (3) Ltr, Davis to Patterson, 29 Jan 41. (4) Ltr, Asst Atty Gen to Patterson, 27 Feb 41. (5) Ltr, Patterson to Davis, 6 Mar 41. Last three in USW Files, 601 (Land Acquisition). (6) Memo, RE Br for Chief Constr Div OQMG, 11 Apr 41. Opns Br Files, H Investigation.

¹⁰⁸ (1) Valliant Interv, 11 Jun 56. (2) Memo, OCoFOrd Industrial Serv Facil for TQMG, 6 Nov 40. 601.1 (Kankakee OW) I. (3) Memo, Valliant for Hartman, 29 Nov 40. 601.1 (Weldon Spring OW) I. (4) Tel Conv, Maj Thomas (Ord) and Groves, 31 Dec 40. Opns Br Files, Burlington OP. (5) Memo, Valliant for Patterson, 31 Dec 40. 601.1 I.

he had obtained initial possession of some 65 tracts. Much of this work had gone forward with remarkable speed. Given advance notice, Valliant was able to open 20 sites to contractors on the same day he received directives. During the last half of 1940 his average time for gaining access was just under 27 days per project. By February 1941, when the first full progress report appeared, the Army had acquired all or part of 85 sites. Valliant by that time had accepted options on more than a million acres and had transferred several million more from the public domain—this in addition to leasing land at 38 projects and renting 2 million square feet of warehouse, office, and garage space. The work of proving titles, making settlements, dismantling structures, moving utilities lines, closing roads, and fencing or removing cemeteries dragged on, for these were time-consuming jobs; but rarely did contractors have to wait before they could commence to build.¹⁰⁹

Selecting Contractors

Seeking to make the most of available contracting talent, Hartman reviewed his requirements for constructors and architect-engineers. For munitions projects he would need concerns with industrial experience and skill in heavy construction; for camps and cantonments, firms familiar with mass housing and municipal and sanitary work; for airfields, specialists in grading and paving. Above all, he would need reliable contractors with the managerial, technical, and financial strength to meet emer-

gency demands. Under the competitive method of award, by which a majority of the smaller, less urgent jobs were let, his choice was restricted to the lowest qualified, responsible bidder. But under the negotiatory method, used on most of the big crash projects, he was able to pick his own man. Choosing among the thousands of potential contractors was a delicate and exacting task.

In May 1940 Hartman began assembling information on candidates for fixed-fee contracts. Announcing that all applicants would receive consideration, he invited interested parties to submit their qualifications and performance records. Constructors were to furnish details as to how their firms were organized, what their financial resources were, how much equipment they owned, and what their experience was with fixed-fee and lump sum work. Architects and engineers were to list personnel and recent commissions. Answers rained in from all over the country, as contractors hastened to offer their services. When Major Thomas arrived in Washington on 14 June, he plunged immediately into sorting and classifying the applications. He and his small staff of engineers and clerks separated constructors from architect-engineers, listed them by states, and began an alphabetical index. Upon formation of the Construction Advisory Committee in July, he turned over to Chairman Harvey files on 320 architect-engineers and 1,140 construction companies.¹¹⁰

Hartman, meantime, was establishing selection criteria. He set rigorous stand-

¹⁰⁹ (1) Real Estate PR, 21 Feb 41, *passim*. (2) Constr Div OQMG RE Br, Annual Rpt, FY 1941, pp. 5-6. Gideon File, 6A3.

¹¹⁰ (1) Final Rpt, Constr Adv Comm, 15 Mar 42, pp. 5-7. EHD Files. (2) Loving, History of the Fixed-Fee Branch, Apr 41. Loving Papers. (3) WD Press Release, 22 Jul 40, sub: Civilian Experts to Aid Army Speed Constr. EHD Files.

ards. To qualify, a firm would have to offer a strong, going organization backed by the capital, experience, and key personnel to complete a given project in the least possible time. Work performed over the past five years would be an important factor; no concern could qualify unless its recent volume of business was more or less commensurate with the estimated cost of the job at hand. Current commitments would also carry weight, for Hartman wished to prevent contractors from accepting more work than they could handle. Ideally, the firm selected would be able to grasp the requirements of the project, provide an adequate force of seasoned, competent men, anticipate problems, distinguish between essentials and refinements, attain maximum speed and efficiency, achieve unbroken progress, and faithfully fulfill the contract. Determined to maintain absolute impartiality, Hartman made it a fixed rule that representations on behalf of applicants by congressmen and others would receive no weight whatever. He made but one concession to politics: other things being equal, he would draw contractors from the section of the country in which the project was located and preferably from the same state. As a matter of sound policy, he intended to spread the work among as many firms as possible. Except in unusual circumstances, the principle would apply: one contract to a contractor.¹¹¹

In mid-July, the newly created Construction Advisory Committee got to

work. On the 17th the members made their first recommendation—for the architect-engineer contract at Springfield Armory. During the next few weeks they were immersed in hiring a staff of fifteen, analyzing a continuing flood of applications, and nominating contractors for a handful of secondary projects, most of which were arsenal roundouts. A good deal of their time was taken up by company officials who came to solicit contracts. After talking to these visitors, the committee made “a very rough attempt at grading them as to size, personality, and energy.” Chairman Harvey emphasized: “We do not reject anybody. . . . Every contractor—’most every contractor at least—is qualified for something if the right job should turn up.”¹¹² The real work of selection had yet to begin. Since the earliest command construction contracts were lump sum, they lay outside the committee’s jurisdiction. And while the new munitions plants were fixed-fee propositions, Quartermaster participation in awarding these contracts awaited settlement of differences with Ordnance.

In June, about the time the first defense construction funds became available, the War Department had informed NDAC of “an internal problem between the Quartermaster Corps and the Ordnance Division as to who should have supervision over the building of plants.” The dispute had arisen over the contract for the new smokeless powder factory at Charlestown, Indiana, the initial project in the industrial preparedness program.¹¹³ Without a by-your-leave to Hartman, General Wesson was proceed-

¹¹¹ (1) Memo, Hartman for Admin Div OQMG, 18 Jul 40. QM 400.13 (Mun Program—FY 1941). (2) Memo by Constr Adv Comm, 31 Jan 41, pp. 4–6. EHD Files. (3) Final Rpt, Constr Adv Comm, 15 Mar 42, pp. 3–5. EHD Files. (4) Statement of Gen Hartman, 5 Jul 55, p. 12.

¹¹² Testimony of Forrest S. Harvey, 12 Feb 41. In *May Comm Hearings*, Part 1, p. 2.

¹¹³ *Minutes of the NDAC*, p. 38.

ing to negotiate an agreement with Du Pont for design, construction, and operation of the plant.¹¹⁴ This move, though contrary to the Defense Act, was hardly unexpected. Ordnance officers had long favored a decentralized construction setup similar to the one that existed before the autumn of 1917. In their view the agency that would run the plants should also design and build them. "*Ordnance* was charged with the responsibility of producing munitions in specified quantities and schedules," one of them explained. "The Construction Division was not. In war, end results count, not preliminaries."¹¹⁵ Additional pressure toward decentralization came from the industrialists on whom Ordnance had to rely. The so-called "merchants of death" were naturally reluctant to expose themselves to another ordeal like the Nye investigation. Accepting a defense role as a patriotic duty, they were in a position to insist on their own terms. As prospective plant users, they wished to control construction and design. Thus, Wesson's arrangements with DuPont followed a certain logic. But from the Quartermaster standpoint this logic was sophistical. Fearing a return to the chaotic conditions of early 1917, Hartman made strenuous objections.

Colonel Burns tried to reconcile these differences. There was, he felt, no easy answer. As an Ordnance officer with thirty-six years' service, he could well appreciate Wesson's position. Equally clear to him was the fact that the plants were part of Hartman's program.¹¹⁶ With

his executive, Major Dillon, also an Ordnance officer, Burns outlined a procedure, a fair and proper way, he thought, of handling munitions projects. The using service would name firms to operate the plants and to act as "management agents" during construction; Hartman would choose building contractors "in consultation with and subject to the concurrence of the interested service." The Quartermaster and Ordnance or Chemical Warfare would draft the contracts together, the using service "determining all questions of a technical nature involving final operation" and the Quartermaster taking responsibility for "all construction phases." Supervision of projects would be in accordance with these principles. Any disputes between the services would go to the Assistant Secretary. Johnson approved the procedure on 11 July.¹¹⁷ But things did not turn out as Burns had planned. Not only did Wesson avoid compliance, signing his agreement with DuPont on the 17th and speeding negotiations with the Chrysler Corporation toward a single architect-engineer-constructor-operator contract for the new tank arsenal at Detroit, but he also attempted to divorce the Quartermaster Corps from the Ordnance program by seeking changes in the Defense Act.

Secretary Stimson had been in office only a few days when Wesson asked him to sponsor a rider to the supplemental appropriation bill recently introduced in Congress. The proposed amendment would empower the Secretary to assign construction projects to any arm or service. Uncertain of his ground, Stimson consulted Benedict Crowell, who op-

¹¹⁴ Completion Rpt, Indiana OW, 6 Nov 42, p. 5. EHD Files.

¹¹⁵ Comments of Gen Campbell, VIII, 58. EHD Files.

¹¹⁶ Burns Interv, 24 May 56.

¹¹⁷ Memo, Burns for Johnson, 11 Jul 40, and approval thereon. 470 Part 1.

posed the change¹¹⁸—and informed opinion was solidly behind the ex-Assistant Secretary. “All the logic of experience,” said Harrison, “indicates that under one central authority . . . the program ought to be carried out more soundly, more expeditiously, and more economically than would be the case were the execution of construction handled by the several services.”¹¹⁹ A similar statement came from the Hogan committee.¹²⁰ Meanwhile, the Construction Division offered a spirited defense of the existing law. Maintaining “that much loss of time and money will be caused by the failure to appreciate that the prospective user is seldom the one best qualified to construct the plant,” Hartman blasted the Ordnance amendment. “It would be little short of a calamity,” he warned, if the clock were turned back to early 1917.¹²¹ Although General Moore saw merit in the single contract plan for certain industrial projects, he nevertheless considered the suggested change too sweeping. Confronted by such widespread opposition, General Wesson wavered. Finally, on the last day of July, he withdrew the proposal and agreed to follow the procedure outlined by Colonel Burns.¹²²

During August a contracting pattern emerged. At projects, such as Ordnance chemical and explosives works, where

¹¹⁸ (1) G-4/31858. (2) Stimson Diary, 24 Jul 40.

¹¹⁹ Memo, Harrison for Burns, 31 Jul 40. SW Files, Gen Corresp, 1932-42, Constr Work.

¹²⁰ Memo, Hogan for Dillon, 17 Jul 40. ANMB 334 Comm Members and Min of Mtgs. (3) See also Ltr, Hogan for ANMB, 1 Aug 40. SW Files, Constr Work 261-650.

¹²¹ Memo, TQMG (CDH) for G-4, 23 Jul 40. QM 600.1 (Misc) 1940.

¹²² (1) Handwritten notes by General Moore, 23 Jul 40. G-4/31858. (2) Memo, Schulz for Wesson, 29 Jul 40, and 1st Ind, 31 Jul 40. SW Files, Gen Corresp, 1932-42, Constr Work.

experience in difficult processing techniques was essential, a single firm contracted for design, construction, and operation. The Quartermaster Corps made arrangements for architect-engineering and construction. Thus, Hartman negotiated the construction clauses of an agreement signed with Hercules on 16 August for a powder plant at Radford, Virginia, and at the same time approved Chrysler's choice of Albert Kahn Associates as engineering subcontractor for the Detroit Tank Arsenal. At projects requiring less experience—bag loading plants, shell loading plants, small arms ammunition factories, and the like—the Quartermaster Corps normally awarded separate contracts for architect-engineering and construction. The shell loading plant at Ravenna, Ohio, was the first handled in this way. On 28 August Ordnance signed an agreement with the Atlas Powder Company for operation of the plant. A few days later, Hartman, acting on the advisory committee's recommendations, awarded the architect-engineer contract to Wilbur Watson and Associates of Columbus, Ohio, and the construction contract to the Hunkin-Conkey Company of Cleveland. The compromise satisfied no one. The Quartermaster General disliked the single contract, which tended to make industrialists arbiters in construction matters, while Ordnance would have preferred to use it “altogether if we could, because it facilitates . . . the transition from construction to operation by having the same contractor.”¹²³ Nevertheless, both services had one end in view—to get the plants built; and toward that end, they co-operated.

¹²³ Testimony of Col Francis H. Miles, Jr., 5 Mar 41. In May Comm *Hearings*, Part 1, p. 220.

Late in August the floodgates opened. Upon passage of the National Guard Act, the Construction Advisory Committee was deluged with work. During the next month and a half, the committee nominated firms for sixty fixed-fee contracts, the bulk of which were for troop housing. Then, as the pace of camp selections slackened, there came a surge of industrial jobs, followed by waves of replacement training centers, general hospitals, and depots. Before the year was out, Harvey, Blossom, and Dresser had helped choose more than 140 contractors. Only rarely, as when Ordnance suggested a firm favored by one of its operators, did Hartman proceed without consulting the committee. The advisory group came into the picture when Loving or Lamphere called for nominations. Guided primarily by data in their files, the members first selected a number of firms, perhaps as many as ten. A quick investigation followed. Dun & Bradstreet furnished financial reports; the Bureau of Contract Information, performance ratings. Telephone inquiries went to trade associations and professional societies. Prospective contractors came in for questioning. After narrowing the field to the three it believed best qualified, the committee recommended them in order of preference to General Hartman. The branch chief concerned—Loving or Lamphere—reviewed the recommendations and made a tentative selection. He then cleared his choice with Patterson's office and with NDAC, sending the contractor's name to Hartman for final approval.¹²⁴

At first the Construction Advisory Committee was besieged by demands

¹²⁴ (1) Constr Adv Comm, Recommendations Book. EHD Files. (2) Memo, Constr Div OQMG for USW, 11 Apr 41. QM 600.1 (CPFF) 1941, II.

for preferential treatment. "Political pressure from members of Congress to award work to their constituents was a strenuous problem," General Hartman related. "Furthermore, the White House almost daily called on the telephone in reference to work for specified firms."¹²⁵ Observing that the placement of emergency contracts "was too big a thing for the politicians not to get mixed up in it," Dresser exclaimed: "They were on our necks. Believe me, the heat was terrific."¹²⁶ There was also plenty of heat on congressmen and the President. Many, many firms were soliciting their help in landing defense contracts, and as one Representative pointed out to Harvey, "Of course, we have to run for office and you do not."¹²⁷ In dealing with political requests, the Construction Division proceeded tactfully but resisted pork-barrel contracting. Hartman invariably suggested that congressmen ask their constituents to file formal applications with the Construction Advisory Committee. At his direction, a letter went to all leading contractors, outlining the method of selection and emphasizing that there were no strings to pull. With Patterson's help, he publicized the policy of giving local concerns first consideration, a policy legislators heartily approved. A meeting at which Quartermaster officers briefed congressional leaders served further to clarify misunderstandings. Gradually the pressure eased. Attempts to sway the committee became increasingly rare.¹²⁸

¹²⁵ Statement of Gen Hartman, 5 Jul 55, p. 13.

¹²⁶ Dresser Interv, 2 Apr 57.

¹²⁷ May Comm Hearings, Part 1, p. 53.

¹²⁸ (1) Circ, OQMG to various contractors, 15 Aug 40. EHD Files. (2) Memo, Schulz for Gregory, 13 Sep 40, and related corresp. QM 600.1 (CPFF) (Policy) I. (3) QM 600.1 (CPFF) (Misc Corresp) 1939-40.

Influence peddlers offered the most serious threat to the Quartermaster's reputation for impartiality. The earliest fixed-fee contracts carried the following "covenant against contingent fees":

The Contractor warrants that he has not employed any person to solicit or secure this contract upon any agreement for a commission, percentage, brokerage or contingent fee. Breach of this warranty shall give the Government the right to terminate the contract, or in its discretion, to deduct from payments due the Contractor the amount of such . . . fee. This warranty shall not apply to commissions payable by Contractors upon contracts or sales secured or made through bona fide established commercial or selling agencies maintained by the Contractor for the purpose of securing business.¹²⁹

But persons who claimed they could procure contracts through inside connections were already at work. Conspicuous among them was a firm that openly advertised its services. Although Hartman repeatedly warned contractors against having dealings with such people, a number of companies hired intermediaries or bought advice from persons "in the know." One case hit close to home. Late in September, while negotiations were in progress with the Consolidated Engineering Company of Baltimore for construction at Camp Meade, Hartman learned that Consolidated had agreed to pay Gen. Richard C. Marshall a commission on any work he was helpful in securing. Reportedly several other big concerns were clients of the onetime Chief of Construction. Marshall's activities put the division in an awkward position, for although Quartermaster Regulars had little to do with him, the returned veterans of the World War I

construction crew were frequently in his company. At Loving's insistence Consolidated broke off with Marshall before signing the Meade contract. After telling Patterson what had happened, Hartman adopted a new safeguard: henceforth every fixed-fee contractor had to sign an affidavit that he had paid no one to assist him in any manner whatever to obtain the award.¹³⁰ Satisfied that the War Department was in the clear, Patterson wrote to a friend, "I am confident that there is no fancy stuff going on."¹³¹

Resisting pressure was clearly a negative approach to selection; the main job was one of choosing wisely among applicants. Although plenty of concerns believed themselves capable of handling emergency assignments, only a small minority could meet Hartman's criteria. Comparatively few enterprises possessed the experience required for the Army's high-speed fixed-fee projects, most of which were estimated to cost between \$5 million and \$30 million. "You take a \$5,000,000 job that has to be done in three months," Harvey explained, "and it is equivalent to a \$20,000,000 job on an annual basis. In fact, because the organizing time is so short, it takes considerable ability to do that amount of work in that amount of time and do it efficiently or with any pretense of efficiency." It took considerable capital, too. To finance a fixed-fee job, a constructor had to put up about 20 percent of the total cost. At the time the program began, raising several million dollars was

¹³⁰ (1) Memo, Hartman for Burns, 18 Nov 40. SW Files, Constr Work 251-650. (2) Truman Comm Hearings, Part 2, pp. 581-603, 491-93. (3) Dresser Interv, 2 Apr 57; Marshall Interv, 23 Sep 55; Pagan Interv, 8 Mar 57.

¹³¹ Ltr, Patterson to Richard C. Evarts, Boston, Mass., 17 Oct 40. SW Files, Constr Work 251-650.

¹²⁹ CPFF Form 1, approved by the ASW, 12 Jul 40, art. XIV.

an impossible feat for most. Personality was another limiting factor. Some reputable and well-to-do firms were passed over because their key officials were too old and lacking in drive to cope with crash deadlines. The advisory committee hoped to find the right contractor for every job, but, as Harvey pointed out, there was no scientific way of doing this. "It is entirely a matter of judgment," he said, "as to who will serve the Government best."¹³²

Determined to take no chances that might jeopardize success, the committee sought top-grade talent for the initial camp projects. In states, such as California, Texas, Illinois, Pennsylvania, and New York, which abounded in first rate contractors, they had no difficulty picking local outfits. But in some areas of intensive camp construction, particularly in the South, they encountered a shortage of qualified concerns. As a result, a number of early projects went to distant firms with wide experience and ample resources.¹³³ Harvey defended the selection of Starrett Brothers and Eken of New York as constructors for Camp Blanding, Florida, stating that "\$10,000,000 to be done in three months looked like a whale of a job, and we were scared to death to put anybody on it but pretty big contractors."¹³⁴ Although the committee justified choices of this kind, local interests complained bitterly. One Alabama congressman upbraided the War Department for pursuing a policy which seemed "to take care of the big people, make the big still bigger,

and leave the little people struggling to get along out in the cold."¹³⁵ In the face of numerous protests, Patterson tightened enforcement of the local preference rule. On 13 September he told Hartman to get his permission before selecting any more out-of-state concerns. Another of Hartman's informal spread-the-work rules became War Department policy in November, when Patterson directed him to choose no contractor for a second job if other competent firms were available and, when repeat contracts were necessary, to select only organizations that had completed previous assignments in a highly commendable way.¹³⁶

Meanwhile the advisory committee found ways to broaden the basis of eligibility. During September it began performing "shotgun marriages," naming several medium-sized concerns to act as joint venturers. Two Atlanta firms teamed up to build Camp Stewart, Georgia, and two companies from Memphis undertook construction at Camp Forrest, Tennessee. To make these combinations doubly strong, the committee pooled specialists—utilities experts, earthmovers, and the like—with general contractors. "What we needed," said Dresser, "was reserve power, so that one thing going wrong wouldn't upset the whole job."¹³⁷ Still there was much risk involved, for if the partners proved to be incompatible, the project was sure to suffer. The committee went as far with this method as it dared, employing it during 1940 on some thirty-eight con-

¹³² Harvey's Testimony, 12, 13 Feb 41. In *May Comm Hearings*, Part 1, pp. 8, 13, 44, 2, 27.

¹³³ OQMG, Constr Contracts Awarded or Approved, 12 Nov 41.

¹³⁴ Harvey's Testimony, 25 Apr 41. In *Truman Comm Hearings*, Part 1, p. 335.

¹³⁵ May Comm *Hearings*, Part 1, p. 50.

¹³⁶ (1) Memo, Schulz for TQMG, 13 Sep 40. QM 600.1 (CPFF) (Policy) I. (2) Final Rpt, Constr Adv Comm, 15 Mar 42, p. 3. EHD Files.

¹³⁷ Dresser Interv, 2 Apr 57.

tracts, including two dozen for camp construction and engineering work.¹³⁸ The Assignment of Claims Act, approved on 9 October, altered the situation more profoundly. Under its provisions, a contractor could, to use Harvey's expression, "hock his contract at the bank and borrow money on it."¹³⁹ Many competent firms whose limited assets had heretofore barred them from consideration were now in the running for camp contracts.

The magnitude of industrial projects and the complexity of the manufacturing processes involved precluded wide distribution of munitions work. True, the Quartermaster Corps succeeded, to some extent, in awarding the less challenging loading and small arms ammunition plants to regional concerns and to combinations of local firms with companies of national reputation. In cases of this kind, the committee exercised utmost care. Reviewing the selection of four constructors for the Hoosier Ordnance Plant, Harvey said: "As to a camp if you make a mistake it is not so terribly vital, but as to an ammunition plant it is extremely vital that it be handled properly. For that reason we thought we should get all of the powerful companies we could find that were not already engaged in that type of work."¹⁴⁰ Enlisting contractors for Ordnance chemical and explosives works was the hardest task of all. Because there had been no projects of the kind in the United States since World War I, only a handful of experienced men were available. For design

and construction of these installations the Army had to rely almost entirely on a few industrial specialists centered in the metropolitan areas of Cleveland, Detroit, Chicago, Los Angeles, Boston, and New York and the engineering departments of such corporations as Du Pont and Hercules.

To make certain completed plants would be acceptable to operators, the Construction Division usually followed their recommendations. For example, at the suggestion of the Proctor & Gamble Defense Corporation, the committee selected the H. K. Ferguson Company of Cleveland to design the Wolf Creek shell loading plant near Milan, Tennessee, and to act in combination with a local road builder as constructor. Occasionally, Quartermaster contracts went to the operator himself. In September, when the time came to place agreements for the shell loading plant at Elwood, Illinois, Ordnance requested that the operator, Sanderson & Porter, also serve as architect-engineer and builder. Hartman agreed and thus bypassed the advisory committee—a circumstance which later had the unanticipated result of clearing Mr. Blossom of any connection with the award to his own company. Similarly, Day & Zimmermann of Philadelphia, who were to operate another shell loader, the Iowa Ordnance Plant, were named, in this case by the committee, to design the installation. Hard pressed to find industrial engineers, and generally at the insistence of the using service, the division accepted several firms for second or third contracts. Smith, Hinchman and Grylls, especially qualified by their long experience with plants in the Detroit area, designed two of the early small

¹³⁸ Constr Adv Comm, Recommendations Book. EHD Files.

¹³⁹ (1) 54 *Stat.* 1029. (2) May Comm *Hearings*, Part 1, p. 16. (3) OQMG Circ Ltr 92, 7 Nov 40. OCE Legal Div Lib.

¹⁴⁰ May Comm *Hearings*, Part 1, p. 3.

arms ammunition factories, Lake City and Denver. The DuPont Company, offering superior technical knowledge and demanding that certain processes be kept secret, received architect-engineer-construction contracts for both the Indiana powder plant and the ammonia works at Morgantown, West Virginia, and, in addition, served as consultant on the TNT plant at Kankakee, Illinois.¹⁴¹

For their work in selecting fixed-fee contractors, Harvey, Blossom, and Dresser were alternately damned and praised. Criticism was inevitable in a noncompetitive system of selection. Disappointed contractors and their sponsors voiced many protests. Some accused the Construction Advisory Committee of prejudice in favor of big business. Others hinted that the Quartermaster Corps was running a racket or playing politics. To those who knew the facts such talk was nonsense. Within the War Department the committee's performance was recognized as outstanding. "I believe the work performed by the members . . . was eminently satisfactory and successful and was handled honestly and patriotically," said General Hartman. "With the limited salaries that I was able to pay these men it meant a great financial sacrifice on the part of all three."¹⁴² Patterson summed up his opinion of the committee's work as follows: "Careful scrutiny has convinced me . . . that the system which has been followed provides safeguards against

the selection of incompetent contractors, that selections have been honestly and capably made, that personal favor or political influence has played no part in the choice of contractors."¹⁴³ In December 1940, after personally thanking the committee members, Secretary Stimson noted in his diary, "They have done a fine piece of work"¹⁴⁴—a judgment the record abundantly confirmed.

Negotiating Contracts

To company officials who waited expectantly in the corridors of the Construction Division, a nod from Loving or Lamphere signaled success. Ushered into a soundproof office, the prospective contractor learned he was under consideration for such-and-such a job. He then was handed a draft of the contract, a cost estimate, and a description of the work. In addition, he received a questionnaire about his resources, organization, personnel, policies, and plans for the project. Presently a team of negotiators arrived for the first of several conferences leading toward a formal contract. Loving and Hartman were usually on hand to bargain with construction contractors; Lamphere, Sherman, and Tatlow conducted talks with architect-engineers. Negotiations were secret and generally required two or three sessions. Because the division's representatives were sorely pressed for time, these meetings frequently took place at night.¹⁴⁵

A dearth of engineering data handicapped the negotiators. Descriptions of

¹⁴¹ (1) Memo, Constr Div OQMG for USW, 16 Jan 41. QM 600.1 (Misc—Jan, Feb, Mar) 1941. (2) Memo by Constr Adv Comm, 31 Jan 41, pp. 47, 33, 39. EHD Files. (3) May Comm *Hearings*, Part I, pp. 197, 166. (4) OCE, Mil Constr Contracts, May 46, Part I, Sec 1, p. 43; Part II, Sec 1, p. 151.

¹⁴² Statement of Gen Hartman, 5 Jul 55, p. 12.

¹⁴³ 29 Apr 41. In H Subcomm of the Comm on Appns, 77th Cong, 1st sess, *Hearings on Military Establishment Appropriation Bill for 1942*, p. 76.

¹⁴⁴ Stimson Diary, 17 Dec 40.

¹⁴⁵ (1) Loving, Hist of the FF Br, Apr 41, pp. 3–10. (2) Interv with Arthur L. Sherman, 14 Oct 59.

the jobs were necessarily vague. Loving and the others usually knew what types of buildings were to be built, how much money was budgeted for a project, the number of men to be housed at a given camp, and the planned daily output of a particular munitions plant. Beyond this, they had little specific information. In the absence of detailed site surveys, they knew almost nothing "as to the actual extent of utilities to be constructed or the conditions under which the work would be undertaken, that is, whether rock would be encountered, or quicksand and water, or good clay."¹⁴⁶ Contractors would find out what was what only after they took over the projects. As far as difficulty and extent of work was concerned, the Construction Division offered them a blind bargain.

Agreement on terms was more or less a routine affair, since the contracts followed standard forms. Among other things, building contractors agreed to start work immediately, maintain a responsible resident manager at the site, use the best available labor and materials, incorporate into the project any materials furnished by the government, keep complete records and accounts which would be open to inspection at all times, take advantage of all discounts, rebates, and salvages, and do everything necessary to complete the job in an acceptable manner and with all possible speed. Under the terms of their contracts, architect-engineers pledged to run surveys, draw maps, make layouts, prepare estimates, adapt standard plans to the sites, design structures for which no typical drawings existed, and supervise

construction. Contractors would receive a fee for their services and reimbursement for virtually all expenditures except interest, off-site overhead, and company officials' salaries. The government reserved the right to terminate the contracts at any time and for any cause.¹⁴⁷

A noteworthy feature of the fixed-fee construction agreement was a provision that bound the contractors to lease their equipment to the government. Rents would follow a schedule prepared by Loving and endorsed by the AGC. Because contractors were supposed to derive profits solely from their fees, the schedule was designed to reimburse them for the costs of ownership only, that is, for insurance, taxes, and depreciation. To protect its equity in leased equipment, the Construction Division inserted a recapture clause into the contracts. This clause provided that title would pass to the government when accrued rentals equaled the value of a machine plus one percent for each month used. Upon completion of a project, the government would have the right to recapture additional pieces of equipment by paying the difference between accrued rentals and value, plus the one percent per month.¹⁴⁸

In their talks with contractors, Loving and Lamphere tried to reach understandings on matters not covered by written agreements. They questioned each constructor as to how he would equip and organize his project, how many key men he would assign, what parts

¹⁴⁶ Loving's Testimony, 25 Apr 41. In Truman Comm Hearings, Part 1, p. 342.

¹⁴⁷ (1) CPFF Form 1, approved by the ASW, 12 Jul 40. (2) CPFF Form, Architect-Engineer Svcs (1940).

¹⁴⁸ (1) CPFF Form 1, approved by the ASW, 12 Jul 40, art. II, par. 2. (2) Constr Div OQMG, Contractors Equip Rental Schedule, Jul 40. 481 Part 1.

of the work he would sublet, and whether he would run an open or a closed shop. They asked each architect-engineer who his top men on the job would be, how large a staff he expected to hire, whether he would farm out any of the planning to other professional concerns, and how he proposed to co-ordinate his work with that of the constructor. They also tried to familiarize contractors with the problems ahead. For example, Loving told representatives of Starrett Brothers and Eken, "You undoubtedly know and realize that there is tremendous pressure being brought from all localities to utilize . . . local talent" He advised the New York firm to give Florida men "first consideration" for subcontracts at Camp Blanding.¹⁴⁹ But, because they recognized that contractors must be free to make decisions on the job, the negotiators did not ask for solemn commitments on such questions. Nor did they try to dictate methods and procedures. "As a matter of fact," Loving explained, "we selected these men because we had confidence in their experience and ability to organize the job, and we didn't feel it incumbent upon us to tell them exactly what they should do. We felt we were hiring them to tell us what to do."¹⁵⁰

Negotiations frequently hinged on questions of fee. The upward limits were prescribed by law. The Act of August 7, 1939, permanently established the maximum payment for architect-engineer services at 6 percent of estimated cost. This statute also provided that fees for

construction work must not exceed 10 percent of estimated cost. On 28 June 1940 Congress reduced the allowance for construction services to 7 percent. Two months later it adopted a 6-percent limitation on constructors' fees, which remained in effect throughout the war. Although Congress insisted that fees be set at the time of award and adjusted only when there was a substantial change in the scope of the contract, it prescribed no formula for determining them.¹⁵¹

Shortly after Loving joined the division, Hartman told him to be guided by a schedule of minimum construction fees developed by the Hogan committee and approved by ANMB. This schedule established a graduated scale, the fee percentage decreasing as the estimated cost increased. (*Table 5*) Thus, a one-million-dollar contract would pay at least 5.24 percent, while the minimum for a 20-million-dollar job would come to 2.5 percent. As the Hogan group pointed out, cost was only one measure of a project's scope. Recognizing that some projects would require a longer time to complete, greater resources, and more highly specialized management than others, Hartman and Loving adopted a scale of maximum fees, ranging up to 20 percent higher than the ANMB minimums. Meanwhile, after consulting the American Society of Civil Engineers and studying the general fee practices of federal, state, and municipal agencies, Hartman drew up a schedule for architect-engineers. (*Table 6*) These fees were average rather than minimum. Lamphere was to pay more for complicated work and less for simple, but to

¹⁴⁹ Transcript of Negotiations Between Reps of Constr Div and Starrett Bros and Eken, 8 Sep 40. Opns Br Files, Confs.

¹⁵⁰ 20 May 1941. In Truman Comm Hearings, Part 4, p. 1004.

¹⁵¹ (1) 53 Stat. 1239. (2) 54 Stat. 676. (3) 54 Stat. 881.

TABLE 5—SCHEDULE OF MINIMUM FEES FOR CONSTRUCTION SERVICES

Estimated Cost of Project	Fixed Fee
\$ 100,000 or under	\$ 6,000
300,000	17,200
500,000	27,400
1,000,000	52,400
2,000,000	94,900
3,000,000	127,000
5,000,000	175,000
10,000,000	300,000
20,000,000	500,000
(Intermediate amounts to be interpolated)	

Source: Memo, Hogan Comm, 19 Jun 40, sub: FF Constr Contract. ANMB 334 Comm Members and Min.

keep within 20 percent of the scheduled fees.¹⁵²

Before making an offer, Quartermaster negotiators considered the type of project involved and the extent of the services to be rendered by the contractor. In figuring compensation for relatively simple, short-term jobs, such as camps and hospitals, Loving adhered rather closely to the minimum schedule for construction work. His offers for TNT, smokeless powder, and other complex manufacturing plants approached maximum rates. Projects of intermediate difficulty, such as depots, arsenals, and ammunition plants, commanded fees about midway between the minimum and maximum scales. The amount of responsibility a contractor would assume weighed heavily in Loving's computations. He gave the top fee for a project of any given type and cost to contractors who would render "complete service." Thus the largest fees, in terms of percentage, went to contractors who agreed to furnish

all equipment, procure all materials, finance all costs, and perform all work not normally subcontracted. For anything short of complete service, Loving made appropriate reductions. Lamphere used a similar procedure in appraising professional services. He, too, set fatter fees for tougher jobs and paid maximum rates only to architect-engineers who did complete design, made all surveys and investigations, helped place orders and subcontracts, and supervised construction.¹⁵³

Contractors displayed mixed reactions to Construction Division proposals. Some were "satisfied thoroughly," but many protested that their fees were too low. A number pointed out that profits on defense work would compare unfavorably with earnings on ordinary commercial ventures.¹⁵⁴ Offered \$268,298, or 3.5 percent, for the Blanding job, Andrew

¹⁵³ (1) Loving's Testimony, 25 Apr 41. In Truman Comm Hearings, Part 1, pp. 348-49. (2) Rpt, Activities of Constr Div, Jul 40-Nov 41, pp. 74-75. (3) OCE, Contract Negotiation Manual (Rev 1943), pp. 7-8. EHD Files.

¹⁵⁴ Loving's Testimony, 25 Apr 41. In Truman Comm Hearings, Part 1, pp. 349-51.

¹⁵² (1) Loving, Hist of FF Br, p. 10. (2) Rpt, Activities of Constr Div, Jul 40-Jul 41, p. 106.

TABLE 6—SCHEDULE OF AVERAGE FEES FOR ARCHITECT-ENGINEER SERVICES

Estimated Cost of Project	Fixed Fee
\$ 100,000	\$ 3,000
500,000	12,000
1,000,000	19,500
2,000,000	30,000
3,000,000	37,000
4,000,000	42,500
5,000,000	48,000
10,000,000	75,000
Over 10,000,000	^a

^a 0.75 percent of estimated project cost.

Source: (1) Memo, Hartman for Harrison, 6 Aug 40. QM 600.1 (CPFF) (Policy) I. (2) QM 333.9 (Senate Investigation) Part 1.

J. Eken said, "Well, I don't consider 3.5 percent a very luscious fee. On the other hand, we are down here not just for business but also we sincerely want to do our part." He accepted the proposition but reminded Loving, "I still say that is a darned low fee."¹⁵⁵ Others were less amenable than the president of Starrett Brothers and Eken. "We have in several instances had to talk to them rather plainly," Loving disclosed, "that we thought they were making their contribution to national defense, toward preserving the market for free enterprise as we have known it in the past."¹⁵⁶ Although contractors frequently complained that the Construction Division drove hard bargains, they nevertheless accepted its offers.

In choosing the cream of the building industry, Hartman selected contractors who normally set a high price on their services. Fees barely acceptable to top-notch constructors and architect-en-

gineers were far more attractive to those with less impressive qualifications. In fact, there were plenty of firms willing to work for smaller profits. But Hartman was not looking for cut-rate talent. He realized that efficient contractors were worth their hire, that money spent for good management was never wasted. His attitude was summed up in a statement of the Hogan committee:

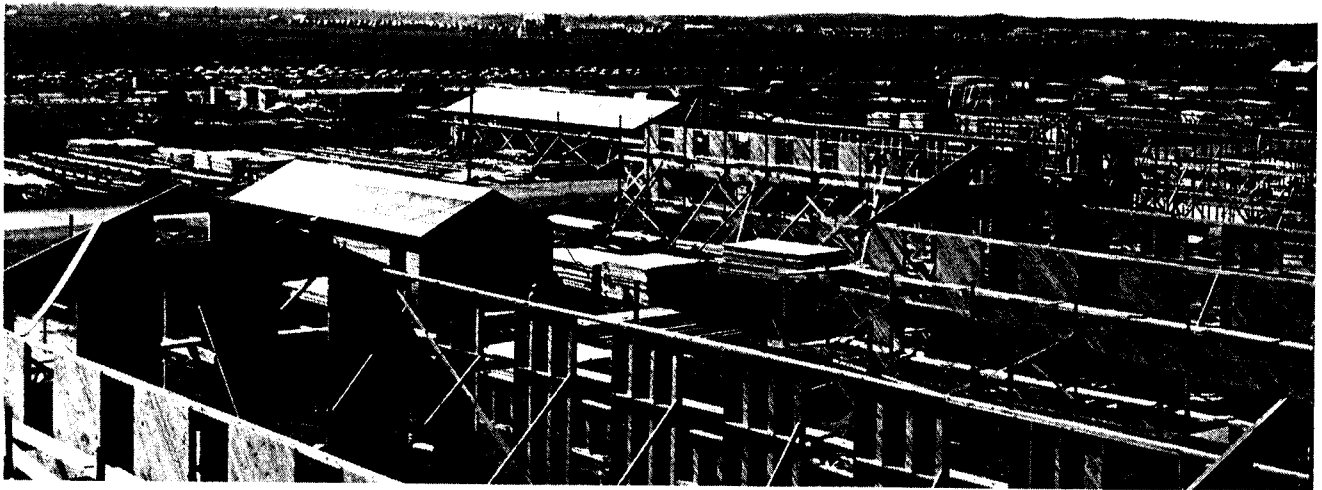
The Government as owner is far less interested in the amount of the fee paid to these agencies than in the savings that can be effected in the actual work by proper design and proper supervision. These amounts far outweigh the combined fees on any work Furthermore, competition in fees does not necessarily produce the best and most trustworthy engineer or contractor. Partners cannot be selected on a competitive basis.¹⁵⁷

Although prominent, gilt-edge concerns were the mainstay of defense construction, little fellows also had a part. During the early months of the program, fixed-price contracts made the talents

¹⁵⁵ Transcript of Negotiations between Reps of Constr Div and Starrett Bros and Eken, 8 Sep 40.

¹⁵⁶ 25 Apr 41. In Truman Comm *Hearings*, Part 1, p. 350.

¹⁵⁷ Ltr, Hogan Comm to Patterson, 30 Jan 41. 600.1 Part 8.



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and resources of many small contractors available to the Army. Unequal to the big, fast fixed-fee jobs, minor firms that normally did a local business were often well qualified for lump sum contracts at smaller and less urgent projects. Moreover, their knowledge of local conditions and their low overhead gave them a competitive advantage over companies operating on a national or international scale. Totalling some \$100,000,000 during the second half of 1940, the fixed-price program was handled largely by local outfits. Of 150 advertised contracts amounting to \$40,000 or more awarded from July through December, 86 percent went to firms in the same state as the project or in neighboring states. The proportion of negotiated fixed-price contracts placed locally was even higher; of 25 such agreements let during this same period, only one went to a distant concern. In addition, small builders and specialty firms shared profitably in

the program as subcontractors on fixed-fee projects.¹⁶⁸

With the signing of contracts, the way was clear for the actual work of moving earth and erecting buildings. The preliminaries had gone swiftly. Between issuance of directives for the National Guard camps and start of work by fixed-fee contractors, an average of only eleven days elapsed. The time required for other types of projects was not much greater, seldom more than three weeks.¹⁶⁹ Off to a running start, Hartman had reason to be fairly hopeful. If the contractors took hold quickly, if work could be pushed despite the shortage of funds, and if winter came late, critical deadlines might still be met.

¹⁶⁸ (1) OCE, Mil Constr Contracts, Part 1, Sec. 2, *passim*. (2) OQMG, Constr Contracts Awarded or Approved, 12 Nov 41, *passim*.

¹⁶⁹ (1) G-4, Constr Hist at Major Stations, 1940-41. G-4/32439. (2) Constr Div OQMG, List of Directives, 15 Mar 41. EHD Files. (3) OQMG, Constr Contracts, Awarded or Approved, 12 Nov 41.